X
444

N.-W. P. AND OUDH

FOREST DEPARTMENT.

ANNUAL PROGRESS REPORT OF ADMINISTRATION.

For the year ending 31st March 1892.

Price Rs. 4.

Govt. Press, N.-W. P. & O.—Sec. B 262.—11-8-92.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

No. 68 of 1892-93.

From

A. E. WILD, Esq.,

Conservator of Forests, Central Circle,

North-Western Provinces and Oudh,

To

The SECRETARY to GOVERNMENT,

North-Western Provinces and Oudh,

Revenue (Forests) Department.

Dated Naini Tal, the 16th July 1892.

Sir,

I have the honor to submit the Annual Forest Administration Report of the Central Circle for the year 1891-92.

I have the honor to be,

Sir,

Your most obedient servant,

A. E WILD,

Conservator of Forests, Central Circle,

N.-W. P. and Oudh.

CENTRAL CIRCLE REPORT.

TABLE OF CONTENTS.

CHAPTER I

AREA AND BOUNDARIES

1 *Area.*

PARA.		PAGE.
1	Changes during the year	1
2	Area of forests and pasture lands under District control	*ib*
3	Changes in areas by Divisions	*ib.*
4	Forest settlements	2
5	New reservations	*ib.*
6	Transfer of District forests	2

2 — *Boundaries*

7	Work of the year	3
8	Detail by Divisions..	*ib*

CHAPTER II.

SURVEYS, WORKING PLANS, AND ANNUAL PLANS OF OPERATIONS.

1.—*Surveys.*

9	Work of the year	4
10	Detail by Divisions	*ib*

2 — *Working Plans*

11	Work of the year	4
12	Khair forests of the Kumaun Division	5
13	Bamboo working schemes	*ib.*
14	Revision of existing plans	*ib*
15	Deviations from sanctioned Working Plans	6

3.—*Annual Plans of Operations*

16	General	6

CHAPTER III

PROTECTION AND IMPROVEMENT.

1 — *Establishments.*

17	Changes in the Controlling Establishment	6
18.	Sanctioned and actual expenditure on establishments	7
19	Dehra Dun School students	*ib.*
20	Provincial Forest Service and Subordinate Service	8
21	Health of establishment ...	*ib*

2 — *General Protection and Breaches of Forest Laws*

22.	Forest offences	8
23	Cases taken into Court	*ib*
24.	Cases compounded	9
25	Special important cases	*ib.*

3.—*Forest Fires.*

26	General	9
27.	Details of failures by Divisions	11
28	Classification of fires	12
29.	Rules under G. O. No. $\frac{340F}{845-40}$, dated 2nd May 1891	*ib.*

4 — *Grazing and Fencing*

30.	General remarks on grazing	13
31	Areas closed to grazing	15
32	Grazing dues and revenue on sale of grass	*ib.*
33.	Fencing	*ib.*

PARA		PAGE
	5.—Natural Reproduction	
34	Natural zones	15
35.	Natural reproduction in the higher hills	16
36	Ditto in the submontane and Bhábar forests	ib
37	Ditto in the plains	ib
	6.—Artificial Reproduction	
38	General remarks	17
39	Regular plantations	ib
40	Cultural operations	18
	7.—Early thinnings, removal of inferior species, cutting of creepers, &c	
41	General	18
42	Detail of Divisions	19
	8.—Experiments and Exotics.	
43	Measurements of the growth of sál	19
44.	Production of katha	ib.
	9.—Communications, buildings, and other works.	
	(a)—COMMUNICATIONS.	
45.	Roads and bridges	20
	(b)—BUILDINGS	
46.	Buildings of the year	20
47.	Ditto and Forest inspection-houses in the Circle	21
48.	Additional accommodation	22
	(c)—OTHER WORKS	
49	Other works	22

CHAPTER IV

OUTTURN AND WORKING

50.	Summary of produce removed from the forests (Forms Nos. 54 and 55 and Appendix D)	23
51.	Ditto of main facts of the year's outturn and working	24
52	Method of felling and agency of export	25
53	Number and kind of trees felled	26
54	Details by Divisions	ib

CHAPTER V

FINANCIAL RESULTS.

55.	General summary	27
56.	Revenue (Form No 56)	28
57	Expenditure (Form No 58)	ib.
58	Details by Divisions	ib.
59	Financial results (Form No 62)	29
60.	Revenue and expenditure under Budget heads	ib.
61	Value of timber and live and dead stock (Forms Nos 57 A and B)	30
62	Outstandings of revenue (Form No 60) Outstandings against contractors and disbursers (Form No 61)	ib.
63	Net result of the year's transactions	ib

CHAPTER VI.

GENERAL REMARKS.

64	Supply of firewood to the station of Naini Tal	30
65	Working of bamboo forests	31
66	Denudation of forests at Almora	ib.
67	Relations between District and Forest Officers	ib.

ANNUAL STATEMENTS

Form No 40	Area of Reserved Forests	iii
" " 49	Ditto Protected ditto	v
" " 49	Ditto Unclassed State Forests	vi
" " 50	Register of breaches of Forest Rules	viii
" " 51.	Area of forest tracts protected from fire during the dry season	x
" " 52	Ditto plantations	xvi

PAGE

Form No. 54 Outturn of timber and firewood xviii
" " 55. Ditto of minor forest produce xxii
" " 56. Account of timber and other produce cut or collected by Government agency and brought to sale depôts or sold locally xxvi
" " 57A. Abstract showing the value of timber and other produce at sale depôts ... xxviii
" " 57B. Ditto of live and dead stock xxix
" " 58 Summary of revenue and expenditure of the Divisions ... xxx
" " 59 Account current xxxiii
" " 60. Revenue received and outstandings on account of revenue ... xxxiv
" " 61 Outstandings and liabilities on account of contractors and disbursers ... *ib*
" " 62 Financial results xxxv

APPENDICES.

A —Statement of works prescribed in the plans of operations for 1891-92, unexecuted xxxvi
B —Statement of areas closed to grazing during 1891-92 ... xxxviii
C —Abstract record of the growth of sál in specimen plots in the Sub-Himalayan Forests ... xxxix
D —Produce removed by free grantees and right holders for 1891-92 ... xl
E —Statement showing yield of bamboos and estimated value during the eight years 1884 85 to 1891-92 xli

ADDENDUM.

CENTRAL CIRCLE FOREST REPORT, 1891-92.

Add the following at foot of Appendix C, page (xxxix).

Mean annual increment in sectional areas in square feet per acre.	1·884	2·023	1·658	1·448	...	...	...	...	2·050	2·465	2·170	2·092	2·347	3·021	1·546	2·134	1·672	2·063	1·972	2·537

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN THE CENTRAL CIRCLE

OF THE

N.-W. P. PROVINCES AND OUDH

For the year 1891-92.

CHAPTER I.—AREA AND BOUNDARIES.

1.—AREA.

Changes during the year.

THE following statement shows the changes that have taken place in the areas on the books of the Forest Department during the year under report, resulting in an addition of 33,058 acres to the total area :—

Class of forest	At the commencement of the year	Added	Excluded.	At the close of the year.
	Acres.	Acres.	Acres.	Acres
Reserves	1,022,835	104,146	18,089	1,108,892
Protected .	59,921	...	52	59,869
Unclassed	75,454	2,050	54,997	22,507
Total	1,158,210	106,196	73,138	1,191,268

20,815 acres of this increase were, however, due merely to the revision of areas. The actual addition was therefore only 12,243 acres—10,245 acres reserves, and 2,050 acres unclassed forests ;—52 acres protected forests have been excluded.

Area of forests and pasture lands under District control.

2. If to these areas are added, as desired in paragraph 3 of the Government of India review of the report for the past year, the forests and pasture lands under the management of District Officers, obtained from the Commissioners of Divisions, it will be observed that the total area of forests and waste lands in the Circle is 3,385,316 acres, while the total area of the Circle is calculated to be 13,300,388 acres. The following is the detail :—

		Acres.
Reserves		1,108,892
Protected		59,869
Unclassed	Under Forest Department management .	22,507
	" management of District Officers	2,194,048
	Total .	3,385,316

Changes by Divisions.

3. The details of the changes in the different classes of forest exhibited in Form No. 49 is as follows :—

(a)—Reserved Forests.

Naini Tal.—Six thousand and four hundred acres, the estimated area of that portion of the Dolmar-Mora reserve, the Dolmar-Mora block, lying within the Naini Tal Division, finally notified as a reserve under section 19 by Government Notification No. $\frac{818F}{110A-23}$, dated 6th November 1891, were added, while three acres were excluded under section 26 of the Forest Act and transferred to the Ránikhet Cantonment for a rifle range, causing a net increase of 6,397 acres; 145 acres, including the Chaubattia nursery and gum plantation, were also transferred from the Ránikhet Cantonment in exchange for 52 acres of the Ránikhet protected forest and added to the Ránikhet reserve, but as the final notification has not yet issued, the area does not appear in Form 49.

Kumaun.—The reservation of the Dolmar-Mora reserve above alluded to involved an increase of an approximate area of 3,848 acres, the Beluti block, to the reserved area of this Division.

Ganges.—In the Ganges Division the reserves have undergone no actual change; but a recalculation of areas, carried out by the Forest Survey Branch in 1890-91, has occasioned a nominal increase of 38,901 acres and a decrease of 18,086 acres, or a net addition of 20,815 acres.

Bundelkhand.—Great progress has been made in Bundelkhand, where an area of 54,997 acres of former unclassed forests has been brought under the Act as reserves by virtue of Notification No. $\frac{713F}{54\text{-}97}$, dated 28th September 1891.

(b)—Protected Forests.

The only change in the protected forests has been in the Almora District of the Naini Tal Division, in which District 52 acres above mentioned were excluded by Notification No $\frac{260F}{247H-19}$, dated 23rd March 1892, and handed over to the Rámikhet Cantonment for a rifle range

(c)—Unclassed Forests.

The chief change in the unclassed forests has been the reservation under the Act of the 54,997 acres in the Bundelkhand Division already alluded to, 2,050 acres District forests, undergoing settlement, have been handed over to the management of the Department in anticipation of the issue of the final notification declaring them reserved There has thus been a net decrease of 52,947 acres.

Forest Settlements.

Forest Settlements.

4. The earlier constituted reserves of the Naini Tal, Kumaun, Garhwál, and Ganges Divisions were originally gazetted under section 34 of the Act, and although a list of villages having rights or privileges in the forests had been prepared about that time or previously, the list in no way defined any of the rights admitted This omission was subsequently rectified as regards the right to grazing, and in continuation of the inquiries then set on foot the necessity for a more definite specification of the remaining rights prominently declared itself and led to the issue of notifications ending with Notification No $\frac{239F}{213\ 55}$, dated 9th March 1892, appointing Pandit Bhawani Dat Joshi, Deputy Collector, Forest Settlement Officer under section 4(c) of the Forest Act, and the Commissioner of Kumaun the appellate authority under section 16.

Pandit Bhawani Dat began work in January 1892, and by the close of the year had visited a great many of the villages in the Kumaun, Garhwál, and Ganges Divisions, and had completed the whole of the outdoor work in the submontane forests.

Attention being drawn by the Government of India to the imprecision and indefinite nature of some of the rights admitted in the Bánda forests reserved under Notification No $\frac{713F}{54\ 97}$, dated 28th September 1891, further enquiries in this respect were undertaken and an amended notification has been issued since the close of the year

The expenditure during the year on Forest Settlement work has been Rs. 1,425, of which Rs 1,242 have been charged in the Kumaun Division.

New reservations

5 The final notifications gazetting the new Dolmar-Mora reserve of the Kumaun Civil Division and the reserves of the Bánda District, mentioned in paragraph 3, appeared during the year, the former in November 1891 and the latter in September 1891.

The preliminary notification under section 4 regarding the 145 acres of the Rámikhet cantonments added to the Ramikhet reserve issued in February 1892, but the final notification has not yet appeared.

The notification proposing to reserve the two areas of 550 and 1,500 acres of the Paniah and Lalpandhar, alluded to in paragraph 4 of last year's report, issued on the 25th February 1891, but the issue of the proclamation under section 6 was, however, deferred till November 1891, and the final notification is still pending.

6. The question of the extension of the control of the Department to some of the more valuable of the District forests in the Kumaun Civil Division, alluded to in paragraph 3 of the review of the Local Government of the report of last year, is still under consideration. Although the advisability of placing such forests on a legal footing chiefly with a view to curtail khil cultivation has been acknowledged, it was decided, as any enquiry into rights would be a great undertaking, that only those portions most urgently in need of legislation should be attempted at present, and a statement of such areas has been prepared by the Department in conjunction with the Deputy Commissioner of Naini Tal and was forwarded to the Commissioner in February 1892.

Transfer of District Forests.

2.—Boundaries.

7. The work done during the year under this head is thus summarized :—

Work of the year.

Divisions.	Boundary lines.			Pillars.		Numbering.	Cost.		
	New work.	Intermediate stones.	Repairs.	Newly erected.	Repaired.	Pillars.	New works.	Repairs.	Total.
	M. C.	No.	M. C.	No.	No.	No.	Rs.	Rs.	Rs.
Naini Tal ...	...	108	...	167	506	30	141	261	402
Kumaun ...	5 16	...	3 27	14	412	...	94	103	197
Garhwál ...	...	...	27 79	4	74	...	12	123	135
Ganges ..	...	...	13 8	21	129	...	36	133	169
Bundelkhand ...	...	...	...	547	...	1,388	951	...	951
Total ...	5 16	108	44 34	753	1,121	1,418	1,234	620	1,854

The total expenditure, including Rs. 1,425 spent on forest settlements, amounted to Rs. 3,279 against Rs. 4,414 during the year previous.

8. **Naini Tal.**—Some progress in the work of more clearly defining the boundaries of the Ránikhet protected forests by the erection of intermediate pillars has been made, and there now only remain the Bhatronj and Machor forests and part of Airadeo to complete the work. The pillars around village lands acquired in the Gágar-Ninglat reserve have been removed, and those defining villages remaining within the reserved area have been made permanent. The expenditure has been Rs. 402; on new work Rs. 141, and on repairs Rs. 261.

Detail by Divisions.

Kumaun.—Boundary pillars were kept in thorough repair, and the recently disputed boundary at the south of the Kotah Dún was defined by a ditch. The expenditure amounted to Rs. 197.

Garhwál.—Rs. 123 were spent on the upkeep of existing boundaries which are in good order; four new pillars were erected for Rs. 12.

Ganges.—Thirteen miles of boundary line around village land in the Chandi reserve were re-cleared at a cost of Rs. 66; 21 new pillars were built and 129 repaired at a cost of Rs. 103. The dispute with the Ráni of Landhaura, alluded to in last year's report, regarding the south-western boundary of the Chandi reserve, has not yet been settled, but the case is now before the Sub-Judge of Moradabad, and came up for hearing shortly after the close of the year, when it was, however, again postponed.

Bundelkhand.—Five hundred and forty-seven new pillars were erected in the Jhánsi and Bánda ranges at a cost of Rs. 730, completing the work in the former range with the exception of pargana Moth: the numbering of pillars has also received attention,

and a sum of Rs. 221 was spent on this alone in the Lalitpur range, while 110 pillars were also numbered in Bánda.

The total expenditure amounted to Rs. 951.

CHAPTER II.—SURVEYS, WORKING PLANS, AND ANNUAL PLANS OF OPERATIONS.

1.—SURVEYS.

Work of the year.

9. The total expenditure of the Circle on surveys during the year has been Rs. 1,236, or Rs. 217 less than last year, while the cost of work of this nature undertaken for the Circle by the Survey of India and Forest Survey Branch has been respectively Rs. 2,851 and Rs. 294. The latter, Rs. 294, spent in the Naini Tal Division, was on account of work of a previous year and is included in the accounts; that incurred by the Survey of India has apparently not yet been debited to the Department. A second edition of those sheets of the Kumaun and Garhwál Forest Survey, containing the newly constituted Dolmar-Mora and Gagar-Ninglat reserves, was prepared by the Forest Survey Branch, and the sheet containing the former has been received since the close of the year.

The Survey of India Department was engaged on the Lansdowne reserve, the survey of which on the scale of 4″ to the mile was completed, but no map has yet been received. Two hundred copies of a map showing the forests of the Naini Tal, Kumaun, Garhwál, and Ganges Divisions on a scale of four miles to the inch were prepared and supplied on requisition by the Forest Survey Branch at a cost of Rs. 103. On these maps have been denoted the different classes of forests, areas open to rights and grazing, fire protected and under working plans, and copies have been distributed to Divisions for the use of all executive officers.

Detail by Divisions.

10. **Naini Tal.**—No new surveys were undertaken, and maps of the Gagar-Ninglat reserve on the 4″ scale are the only ones, now that the Dolmar-Mora reserve has been completed, that remain to be printed. Rs. 8 were spent on petty work in the Airadeo forest.

Kumaun.—The work of bringing the existing 4″ maps up to date by the entry of changes subsequent to their compilation, alluded to in last year's report, has been vigorously pursued, and the maps for about one-half of the Division have been thus departmentally dealt with at a cost of Rs 550.

Garhwal.—Similar operations were carried on in the Garhwál Division, and an expenditure of Rs 176 was incurred in the survey of roads, fire lines, and buildings, and in putting the same on to the 4″ maps.

Ganges.—As mentioned in paragraph 9, the survey of the Lansdowne reserve was completed. Departmental work consisted in the preparation for the use of the Divisional Officer, at a cost of Rs. 68, of a map of the Division on the scale of 1″ to the mile, showing at a glance ranges and blocks, areas under fire protection open to rights, &c.

Bundelkhand.—No surveys were carried out, tracings of the Jhánsi reserves were, however, received during the year from the Survey of India Department for insertion of the numbering of the boundary pillars, and printed maps may now shortly be expected: an index map of the Lalitpur reserves was also issued, but separate maps of these reserves have not yet been prepared.

2.—WORKING PLANS.

Work of the year.

11 No new working plans were sanctioned during the year. The preparation of a working plan for the newly acquired Lansdowne reserve, mainly with the object of securing a continuous supply of firewood and timber to the Cantonment, was, however, ordered and almost completed by the close of the year.

It will shortly be submitted for the professional scrutiny of the Inspector-General of Forests, and when this is sanctioned there will then only remain, of the Ganges Division, the Sona Nadi range not worked on definite lines. In this respect, however, the remarks in paragraph 14 should be borne in mind.

Mr Leete, newly appointed from Cooper's Hill, was also engaged for a short time in March in the preparation of stock maps of the Garhibulchand and Rehar forests in the Garhwál Division in connection with the revision of the Rehar-Makonia working plan, and Mr Haslett, Extra Assistant Conservator, on similar work in the Kumaun Division from the middle of December to the end of the year, completing the Fatehpur, Dechauri and a portion of the Chakhata range to be used in the preparation of working plans for the whole of the Division, including the sál areas mentioned in paragraph 14 of last year's report which the Conservator, the late Mr. D'Arcy, considered should not be separately treated.

Owing to the change of Divisional Officers nothing was done in the matter of collecting data for the more valuable bamboo and fuel forests of the Bundelkhand Division mentioned in paragraph 16 of last year's report.

The Conservator, the late Mr. D'Arcy, paid special attention to this branch of the Department, and obtained the sanction of the Local Government to the formation of a working plans branch to be attached to the Direction Division, and Mr. Osmaston, Officiating Deputy Conservator of Forests, 4th grade, was appointed to the charge on the 14th February 1892, but owing to the departure of Mr. Down on furlough shortly after the close of the year, he was obliged to retake charge of the Ganges Division, though remaining in charge of the working plans. Consequent on this arrangement he has not, however, been able to devote much of his time to special working plans work, and, in fact, the time that he could devote to this work has been exclusively employed on the Lansdowne plan.

The expenditure on working plans during the year was Rs. 354, of which Rs 307 were expended on the Lansdowne working plan.

Khair forests of the Kumaun Division.

12. Some progress was made in the systematic working of the Khair forests in the Kumaun Division alluded to in previous reports The areas of these forests in the different ranges were ascertained, and a 15 years' rotation with restrictions as to girth prescribed, but it was not found possible to dispose of the coupes thus established for a lump sum as was intended In the Fatehpur range or circle catechu manufacturers refused to work owing to scarcity of water, while in Jaunla Sál there was no demand in consequence of operations in the District forests. In Kalonia and Sarda ranges, however, prescribed areas were felled over , in the former by contractors and in the latter by Government experimentally.

Bamboo working schemes.

13 In the Ganges Division the method of working the bamboo forests has been considerably simplified A scheme for the whole Division, by which the areas are treated on a two years' rotation, half being open and half closed, has received the sanction of the Local Government. Thus a year of working now alternates with a year of rest.

Revision of existing plans.

14 Mr. D'Arcy further directed his attention to the existing working plans, and considering many, if not all, of them more or less unworkable on their present lines, suggested that certain of them should undergo revision. Those mostly in need of revision are perhaps the Ganges, Naini Tal, and Ránikhet plans The former cannot be worked up to as regards selection fellings for green timber, as the fellings have been fixed too high , while one of the chief difficulties in regard to the Naini Tal plan is to meet the requirements of the station of Naini Tal in firewood It was originally intended that only dry fallen wood should be removed, and inferior material

cut back from compartments mainly set aside for the commissariat supply; but much of the latter area is too far distant, and the nearer forests having been cleared of dry fallen wood, it was found necessary to fell or girdle some 4,800 trees of miscellaneous species in the more accessible of the commissariat compartments. Trees below three feet were felled departmentally, while trees above that girth not likely to coppice were girdled and will be felled by the wood gatherers. The arrangement meets an immediate want and is within the somewhat elastic prescriptions of the plan, but needs improvement, which the revision is proposed to effect.

No actual work in this connection, beyond the preparation of a rough draft revision of the Naini Tal plan and the stock maps alluded to in paragraph 11, was, however, undertaken during the year.

Deviations from sanctioned working plans.

15. Generally speaking, it may be said that but little consideration has been given to the due fulfilment of the provisions of the sanctioned working plans, or to the necessity of obtaining the sanction of the Local Government to deviations that have taken place in previous years, either because of the recognised and self-apparent inadaptability of the plans, or in forgetfulness of the rulings of the Forest Department Code on the subject. These shortcomings are, however, now being rectified, and as a consequence of the remarks of the Local Government in paragraph 7 of its review of the report of last year and of the scrutiny of the Inspector-General of Forests, omissions in this respect will in future be avoided.

More care was taken in following the prescriptions of the Nindhaur working plan; but consequent on previous excess fellings a reduction in the number of trees to be felled during the year under report was necessary, and owing to the impossibility of disposal of the produce, the prescribed thinnings in Dulagadh had to be restricted. In other respects the prescriptions of this plan were duly carried out.

The working of the Rehar forest on the strip system was temporarily discontinued with the sanction of Government, while in the Ganges and Kohtri-Palain working circles the number of trees found fit for marking fell short of the selection fellings prescribed for the year under report by the working plans for these forests.

3.—Annual Plans of Operations.

General.

16. The provisions of all annual plans of operations have been carried out as far as possible. Important deviations therefrom are as usual embodied in Appendix A.

The remarks made in the report of the previous year, to the effect that the plans embrace the working season from November to June, while the statement deals with the financial year, are still applicable.

Chapter III.—PROTECTION AND IMPROVEMENT.

1.—Establishment.

Changes in the Controlling Establishment.

17. The charge of the Circle was held by Mr. S. Eardley-Wilmot, Officiating Conservator, up to the 16th July 1891, when he was relieved by the late Mr. D'Arcy, who remained in charge throughout the rest of the year and up to the time of his lamentable death on the 3rd April 1892.

Owing to the completion of the reorganization of the Indian Forest Service, the Circle gained the services of Mr. E. A. Down, Deputy Conservator, 3rd grade, *sub. pro tem.*, from the Panjáb, while those of Mr. A. Smythies, Deputy Conservator, 2nd grade, were, however, transferred to the School Circle.

Mr. F. A. Leete joined the Circle as Assistant Conservator, 2nd grade, from Cooper's Hill on the 5th January 1892.

Mr. F. Beadon-Bryant proceeded on one year's furlough from the 7th November 1891. No officers availed themselves of privilege leave.

The following statement shows the Divisional charges during the year :—

Naini Tal ...	Mr. F. Beadon-Bryant, Deputy Conservator, from 1st April to 6th November. " A. G. Hobart-Hampden, Deputy Conservator, from 7th November to close of the year.
Kumaun ...	Mr. A. G. Hobart-Hampden, Deputy Conservator, from 1st April to 27th November. " J. M. Blanchfield, Extra Assistant Conservator, from 28th November to close of the year.
Garhwál ...	Colonel J. E. Campbell, Deputy Conservator, throughout the year.
Ganges ..	Mr. A. Smythies, Deputy Conservator, from 1st April to 27th June. " B. B. Osmaston, Officiating Deputy Conservator, from 28th June to 21st February. " E. A. Down, Deputy Conservator, from 22nd February to close of the year.
Jhánsi ...	" R. G. Hardy, C.S., Collector, from 1st April to 15th April.
Lalitpur ...	" E. T. Lloyd, C.S., Collector, from 1st April to 2nd April.
Bánda ...	" W. Hoey, C.S., Collector, from 1st April to 4th May.
Bundelkhand ...	" J. M Blanchfield, Extra Assistant Conservator, from 5th May to 21st November. Pandit Raghunath Pathak, Extra Assistant Conservator, from 22nd November to close of the year.
Working plans ...	Mr. B. B. Osmaston, Deputy Conservator, from February to close of the year.

The Jhánsi, Lalitpur, and Bánda Divisions under the civil officers of those Districts were amalgamated and formed into a new Division called the Bundelkhand Division, under authority of Government Order No. $\frac{312F.}{233A.-7}$, dated 10th April 1891.

The Ganges Division has been again unfortunate, in so far as its Divisional Officer has been changed no less than three times during the year.

Sanctioned and actual expenditure on Establishments.

18. The following statement shows the sanctioned and actual expenditure on subordinate forest and office establishments during the past two years :—

Provincial Forest Service (below the rank of Extra Assistant Conservator) and Subordinate Service.					Office Establishment.			
Year.	Permanent.	Temporary.	Total.	Actual expenditure.	Permanent.	Temporary.	Total.	Actual expenditure
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1890-91 ...	35,040	26,838	61,878	54,373	11,184	1,260	12,444	12,235
1891-92 ...	34,620	28,382	63,002	56,103	11,604	1,260	12,864	12,255

There was a decrease in the combined establishments of 10 men in the executive and 1 in the office establishment, the totals of the year being 590 and 35 respectively as against 600 and 36 of the previous year. The reductions were due to resignations, dismissals, &c., and to the reconstitution of the Bundelkhand office.

The reorganization of the Provincial Forest Service below the rank of Extra Assistant Conservator and of the Subordinate Service is under the consideration of the Government of India, and the recognised inadequacy of this branch of the Department need not be further alluded to.

Dehra Dún school students.

19. Two of the ranger probationers, Mr. Martin and Mehdi Hassan, at the Dehra Dún Forest School, passed out in March 1892, and having obtained the certificate in forestry by the higher standard, were drafted into the Provincial Forest Service as rangers on Rs. 50 per mensem. Two foresters also received in March certificates by the lower standard, while the two foresters deputed in July 1891 remained at the school. Of three new probationers selected in January 1892, two having passed the entrance examination held on the 4th and 5th of April 1892, will be deputed to the School in July next.

The Circle has now four rangers and nine foresters holding School certificates.

Provincial Forest Service and Subordinate Service.

20. Both Mr. Blanchfield and Pandit Raghunath Pathak, the Extra Assistant Conservators in charge of Divisions, have managed their charges with credit. Mr. Haslett, Extra Assistant Conservator, has also been well spoken of by his Divisional Officer.

Rangers and the Subordinate Service generally appear from the Divisional reports to have given satisfaction, while the following have been specially brought to notice by their Divisional Officers :—Parshadi Lal and Parshotam, rangers, and Bagh Singh, Gajadhar, Upendra Datt, and Sri Ram, foresters. In the Bundelkhand Division, however, one ranger and two guards were dismissed for dishonesty.

The office establishment has, on the whole, worked satisfactorily and has received commendation from the Divisional Officers. Mr. Shiels, Head Clerk of the Conservator's office, has again shown that zeal and attention to his duties which characterizes his service and calls for the approbation of the Conservator.

Health of establishment.

21. In all the Divisions, except the Ganges, the year was a normal one as regards health, with the usual cases of fever and spleen; but shortly after its close there was a severe outbreak of cholera in the submontane forests, which caused several deaths among the establishment in the Garhwál Division, including that of the Divisional camp clerk. The Divisional Officer himself, Colonel Campbell, was also attacked.

In the Ganges Division the mortality during the year was, however, abnormal, and one forester and six guards died out of a total strength of 167 men.

2.—General Protection and Breaches of Forest Law.

Forest offences.

22. The Forest cases of the year are exhibited in Form No. 50, and the following statement compares the number of such cases with those of the previous year:—

Nature of offence.	Court cases.				Compounded cases, section 67 of Forest Act.				Total number.		Increase.	Decrease
	Number.		Increase.	Decrease.	Number.		Increase.	Decrease.	1890-91.	1891-92.	In 1891-92.	
	1890-91.	1891-92.	In 1891-92.		1890-91.	1891-92.	In 1891-92.					
Injury to forests by fire.	1	12	11	...	19	20	1	...	20	32	12	...
Unauthorized felling, &c.	52	20	...	32	545	398	...	147	597	418	...	179
Grazing without permission.	...	1	1	...	2	9	7	...	2	10	8	...
Other offences ...	3	3	...	...	52	116	64	...	55	119	64	...
Total ...	56	36	12	32	618	543	72	147	674	579	84	179

Cases taken into Court.

23. The number of cases taken before the Courts decreased by 20, from 56 to 36, thus approaching the figures of the previous year. Out of 43 cases sent up for trial, convictions were obtained only in 25, the percentage falling from 89 per cent. in 1890-91 to 58 per cent. The Naini Tal and Bundelkhand Divisions are apparently the only Divisions that make any use of the Courts, and as the latter obtained 80 per cent. of convictions, the low average lies in the Naini Tal Division with only 42 per cent., the explanation being that one-half of the cases tried were fire cases, which are notoriously difficult ones in which to obtain a conviction. The prosecutions involved 183 persons, of whom 46 were punished, while 137 were acquitted. There was a rise of 11 in the number of fire cases, while those of unauthorized felling decreased by so

many as 32. Only one case was tried by Colonel Campbell, one of the two Special Magistrates of the Circle.

Cases compounded.

24. By far the greater number of offences are not, however, taken before the Courts, but dealt with by Divisional Officers themselves, under section 67 of the Forest Act. The number of such cases disposed of during the year amounted to 546, involving 1,104 persons, against 577 cases and 896 persons in 1890-91. The total amount of compensation received was Rs. 2,575, averaging Rs. 4-11-5 per case, against Rs. 2,201 and Rs. 3-13-0 in the year previous.

The cases were compounded in Divisions as follows:—

Divisions.	1890-91.	1891-92.		Average per case.
	No. of offences	No. of offences.	Amount for which compounded.	
			Rs.	Rs. a. p.
Naini Tal { Naini Tal Sub-division ...	255	245	636	1 14 10
Naini Tal { Ránikhet ditto ...	92	85		
Kumaun	128	47	393	8 5 9
Garhwál	41	55	434	7 14 3
Ganges	61	96	1,022	10 10 4
Bundelkhand	...	18	90	5 0. 0
Total ...	577	546	2,575	4 11 5

The large decrease in Kumaun is said to be due to the deterrent effect of punishment in previous years, while the continued high proportion in the Naini Tal Sub-division, though somewhat lower than last year, owing probably to the recent felling of trees mentioned in paragraph 14, is caused by the difficulty in the fuel supply to the residents of Naini Tal, alluded to in the report for that year.

Special important cases.

25. The police investigations in the case of the murder of a forest guard remarked on in paragraph 24 of last year's report resulted in the arrest and commitment of one Pir Bakhsh, also a forest guard, who was, however, acquitted on trial by the Sessions Court.

3.—Forest Fires.

General.

26. Owing to the total failure of the usual winter rains, and an excessively dry spring, the fire season was an early and anxious one; nevertheless the results achieved compare favourably with those of the similar season of 1890, in which year fire spread over 31,418 acres, and especially so when the large additional area brought under protection for the first time, which is always more difficult to treat successfully, is considered. As in 1890, rain fell early in June, but only for a few days, and by the latter end of the month it was necessary, in some instances, to re-establish protection which had been abolished.

The following statement is an abstract of Form No. 51 for the Circle, comparing the results of the season under report for each class of forest and the cost of protection with the figures for the preceding one. Immediately following, these figures are given in detail as reported by Divisions.

Nature of protection.	Area over which protection was attempted.						Failures.						Area actually protected.						Cost of the operations of the year.		Cost				Percentage of the area attempted to total area of reserves and protected forests.		Percentage of failures to the total area attempted.	
	Reserves.		Protected forests.		Total.		Reserves.		Protected forests.		Total.		Reserves.		Protected forests.		Total.				Per acre attempted.		Per acre protected					
	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891	1892	1891	1892	1891.	1892.	1891	1892
	Acres.	Acres.	Acres.	Acres.	Acres	Acres.	Acres	Acres.	Acres	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Pies	Pies.	Pies.	Pies				
By means of a regular system of fire lines and watchers.	450,854	522,100	52,001	54,039	502,855	576,139	1,828	12,191	3,057	5,072	4,885	17,263	448,026	509,909	48,944	48,967	497,970	558,876	21,370	23,608	8·16	7·86	8·24	8·11	46·44	49·29	0·97	2·99
By the ordinary establishment under administrative orders and with the aid of the villagers or trifling expenditure on watchers, &c.	51,641	123,984	4,572	146	56,213	124,130	9,286	3,978	...	...	9,286	3,978	42,355	120,006	4,572	146	46,927	120,152	...	...	...	...	...	...	5·19	10·62	16·51	3·20
Total ...	502,495	646,084	56,573	54,185	559,068	700,269	11,114	16,169	3,057	5,072	14,171	21,241	491,381	629,915	53,516	49,113	544,897	679,028	21,376	23,608	7·34	6·47	7·53	6·68	51·63	59 91	2·53	3·03

Division.	Area attempted.				Area protected.				Failures.				Cost.		Cost per acre attempted, in pies	
	Acres.		Percentage of total area of reserves and protected forests of each Division.		Acres.		Percentage of area attempted.		Acres.		Percentage of area attempted.					
	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.
													Rs.	Rs.		
Naini Tal	90,228	90,577	90·05	94·09	86,926	84,517	96·34	93·31	3,302	6,060	3·65	6·69	1,439	2,381	3 06	5 05
Kumaun	129,326	141,483	43 31	46 79	127,903	135,114	98 90	95·50	1,423	6,369	1·10	4·50	5,463	6,549	8 11	8 89
Garhwál	181,709	181,709	57 80	57 80	181,379	178,953	99·82	98 48	330	2,756	0·18	1·52	9,372	9,117	9 90	9 63
Ganges	101,300	108,631	39·40	39·09	101,300	108,631	100 00	100·00	...	...	...	...	4,589	4,424	8·69	7 62
Bundelkhand	56,505	177,869	45·98	100 00	47,389	171,813	83 87	96·60	9,116	6,056	16·13	3·40	513	1,137	1 7·4	1·23
Total ...	559,068	700,269	51·63	59·91	544,897	679,028	97·47	96·97	14,171	21,241	2·53	3·03	21,376	23,608	7·34	6 47

The area over which protection was attempted was extended by 141,201 acres, there being a net addition of 73,284 acres to the areas under special protection, and of 83,948 acres to those protected by the ordinary establishment, the former including 15,469 acres transferred from the latter, while 2,490 acres were abandoned. Thus the area protected rose from 559,068 acres in 1891 to 700,269 acres in 1892, or from 51·68 per cent. to 59·91 per cent. of the total area of the reserves and protected forests; under special measures from 46·44 per cent. to 49·29 per cent. and under ordinary protection from 5·19 per cent. to 10·62 per cent., including the whole of the reserves of the Naini Tal and Bundelkhand Divisions and 54,185 acres out of the total area of 59,869 acres of protected forests. The additions took place chiefly in the Bundelkhand and Kumaun Divisions.

The failures amounted to 21,241 acres against 14,171 acres last season, and represented losses from the total area attempted of 3·03 per cent. against 2 53 per cent. Naini Tal being the most unsuccessful with 6·69 per cent. and Kumaun following with 4·50 per cent., while Ganges, most remarkably, recorded no fires at all for the second season in succession, and Garhwál only 1·52 per cent.

The total expenditure increased Rs. 2,232, from Rs. 21,376 to Rs. 23,608, while the average cost per acre attempted and protected fell from 7·34 to 6·47 and from 7·53 to 6·68 pies respectively. The cost was the highest in Garhwál, averaging 9 63 pies per acre, and the lowest in Bundelkhand, where it only reached 1·23 pies; it decreased in all Divisions except in Kumaun and Naini Tal, in which latter it rose from 3·06 to 5·05 pies per acre, due to the necessary entertainment of extra watchers owing to the remissness of the villagers in rendering help in extinguishing fires, the highly inflammable nature of the greater part of the forests, and the fact of their being honeycombed with cultivation and traversed by innumerable roads.

No record is made of fires that occur in unprotected areas, which, generally speaking, are subject to annual conflagration, and, indeed, to a large extent are intentionally burnt by the Department as part of its protective measures.

Detail of failures by Divisions.

27. The details of the failures in each Division are as follows :—

Naini Tal.—There were 45 fires extending over only 6,060 acres, which speaks well for the alertness of the Divisional Officer and his staff in extinguishing fires once lighted, a matter of considerable difficulty in a dry chír forest; and when out of twenty-three fires in the Airadeo pine forest ten were kept under 5 acres each and the whole did not cover more than 2,358 acres, the system adopted of having a gang of labourers employed in the vicinity seems to have succeeded admirably though somewhat more expensive. There were six undoubted incendiary fires, most of which occurred in the lately resumed Airadeo protected forest, but the Divisional Officer points out his inability to separate with any degree of accuracy the area burnt through this cause. As a preventive measure in this regard, and as the attempts at firing were most determined, the sanction of Government was obtained to close against rights to grazing a portion of the burnt area under section 29(*b*) of the Forest Act till the 15th November 1892, and it remains to be seen whether this step will have the deterrent effect expected. Six fires, covering 384 acres, were lighted by accident; 14, in extent 1,988 acres, entered from outside, chiefly in areas not protected by lines; 18, spreading over 694 acres, were due to causes unknown, while one of 70 acres in extent originated through the sudden advent of a strong wind while burning the fire line.

The Divisional Officer acknowledges the measures taken by the Ránikhet Cantonment authorities, the willing help he received from the Cantonment Magistrate, and the exertions of his establishment, especially of Ranger Budhi Ballabh.

Kumaun.—Eight fires burnt 6,369 acres; one of 12 acres, for which three offenders were fined Rs. 15 each, occurred through accident, and six extending over 2,414 acres

through causes unknown. The largest fire, burning 3,943 acres, was due, it is supposed, to the negligence of the staff in not setting fire to the trace earlier in the season, and in not securing a sufficient body of men to control the fire when lighted, and is under investigation. In this regard it must, however, be borne in mind that the accident occurred in areas newly attempted and consequently previously overrun by fires, thus entailing little damage. The whole of the forests are now specially protected, yet the cost per acre of protection has only slightly increased.

Garhwal.—There were five fires and 2,756 acres burnt; of these, two fires, covering 1,210 acres, were, it is believed, caused by lightning on one and the same day; one of 1,491 acres was due to supposed incendiarism, and two, aggregating 55 acres, were accidental. The results of fire conservancy in this Division continue satisfactory.

Ganges.—There were again no fires, which reflects great credit on the Divisional Officer and the establishment.

Bundelkhand.—Twenty fires extended over 6,056 acres; of these eleven, aggregating 4,812 acres, were caused through the burning of private forests or came across from the Panna and Sohawal States; four, covering 840 acres, were the results of sparks from passing engines; one of 40 acres was accidental; and four, burning 364 acres, were due to causes unknown.

Classification of fires.

28. The following statement gives an abstract of the above information in the usual form :—

Year.	By the forest establishment when burning fire lines.		Fires which entered the forest by crossing exterior fire lines		By workmen (not in forest employ) by accident.		By villagers, travellers, or soldiers, by accident		Fires caused by lightning or fire balloons.		Maliciously lighted inside the forests.		Cause unknown.		Total.	
	No.	Area in acres.	No.	Area in acres.	No.	Area in acres	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.
1888 ..	5	613	1	365	3	363	3	239	3	658	7	3,950	9	959	31	7,147
1889 .	2	980	5	74	...	...	7	787	...	...	1	14	5	70	20	2,597
1890 ...	5	84	12	11,077	1	12,502	9	1,837	1	2,968	1	063	10	2,289	39	31,418
1891 ...	3	341	11	5,856	4	2,062	5	1,026	..	..	2	3,054	11	1,832	36	14,171
1892 ...	2	4,013	17	3,331	10	1,414	12	3,386	2	1,210	7	4,415	28	3,472	78	21,241

29. In accordance with the instructions contained in the latter part of paragraph 10 of the review of the Local Government of last year's report, it is here remarked that the rules for regulating the lighting of fires in the proximity of reserved forests promulgated by G. O. No. $\frac{340F.}{825\text{-}66}$, dated 2nd May 1891, have apparently had but little practical effect. The rules were distributed, but in no Division was any application to fire any forest or grass land under rule I(*d*) received, nor was any permission to carry fire asked for under rule III. No infringement of the rules was brought to light, and consequently there was no friction between the Departmental subordinates and the owners of land adjoining the forests, which latter is often burnt by the Department in carrying out its protective measures, while other Departmental areas are usually not considered.

Rules under G. O. No. $\frac{340F.}{825\text{-}66}$, dated 2nd May 1891.

While on this subject it may further be observed that rule III seems to overlook the fact that the carrying or kindling of any fire in a reserved forest, except at such seasons as the Forest Officer may notify in this behalf, is an offence under section 25(*c*).

4.—Grazing and Fencing.

General remarks on grazing.

30. Following the arrangement of last year's report, a statement is here given showing the areas open to grazing and the number of cattle that grazed in them. An attempt has this year been made to distinguish between cattle grazed by right holders and those grazed departmentally in each class of forest; but little reliance can, however, be placed on the figures given, which are only very rough estimates, and though a comparison is made between the figures of the present and the past year, further comment is unnecessary, as the latter have proved in more than one instance at least totally wrong.

Division	Class of forest	Buffaloes.				Cows and horses.				Sheep and goats.				Grand Total.				Area open to grazing	Area per head of cattle grazed
		1890 91	Departmentally on payment	Right holders free	Total	1890-91	Departmentally on payment	Right holders free	Total	1890-91	Departmentally on payment.	Right holders free.	Total	1890 91.	Departmentally on payment.	Right holders free	Total.		
			1891 92.				1891-92.				1891 92.				1891-92.				
		No.	No	No.	No.	No	No.	No.	No.	No.	No.	No	No.	No.	No	No.	No	Acres	Acres
Naini Tal	Reserves ...	894	365	1,368	1,733	7,234	590	4,544	5,134	420	440	506	946	8,548	1,395	6,418	7,813	33,833	4 33
	Protected	3,718	372	5,070	5,442	21,833	741	24,384	25,125	7,010	458	6,856	7,314	32,561	1,571	36,310	37,881	55,579	1 47
	Total ...	4,612	737	6,438	7,175	29,067	1,331	28,928	30,259	7,430	898	7,362	8,260	41,109	2,966	42,728	45,694	89,402	1 96
Kumaun ...	Reserves ...	13,479	6,795	8,938	15,733	47,692	21,551	36,186	57,737	3,019	7,797	2,272	10,069	64,190	36,143	47,396	83,539	124,086	1 49
Garhwal ...	Ditto ...	4,371	3,305	2,292	5,597	26,182	8,989	18,750	27,739	31,283	23,228	3,471	26,699	61,836	35,522	24,513	60,035	55,197	0 92
Ganges ...	Ditto ...	8,135	6,148	1,749	7,897	25,454	14,137	10,793	24,930	12,577	8,065	6,448	14,513	46,166	28,350	18,990	47,340	124,130	2 62
Bundelkhand ...	Ditto ..	...	6,068	156	6,224	...	96,993	3,055	100,048		24,272	1,004	25,276	..	127,333	4,215	131,548	194,282	1 48
	Protected .																		
	Unclassed ..																		
	Grand Total...	30,597	23,053	19,573	42,626	128,395	143,001	97,712	240,713	54,309	64,260	20,557	84,817	213,301	230,314	137,842	368,156	687,097	1 59

The increase in the Naini Tal Division has been chiefly in the grazing of the more noxious buffaloes by right holders in both reserves and protected forests, although the number of cattle for which grazing rights are recorded in the Dolmar-Mora reserve has been taken only as one-half of the number given in the schedule which the notification states is double the actual quantity found at that time to be possessed by the villagers. The large increase in the Kumaun Division is due to cattle which grazed partly in reserves and partly in district forests not having been entered in last year's statement. For Bundelkhand no figures were given last year.

Areas closed to grazing.

31. Appendix B gives the areas closed to grazing during the year. The statement has been slightly altered so as to show the class of forest closed. The total area closed is 50·72 per cent., 54·31 per cent. of the reserves, and 3·22 per cent. of the protected forests, while the unclassed forests are entirely open. The only difference is the additional closure of 210 acres in the Ránikhet Sub-Division, but it must be remembered that it is only in the more recently formed reserves and protected forests that the power of shifting areas burdened with grazing rights, or, in other words, of periodical closure of a certain proportion of the forests, has been secured. In the older reserves, comprising by far the larger portion of the total area, fixed portions have been declared "open to rights" and have been adhered to. It has, however, recently been suggested to the Commissioner that this important question might well receive attention from the Forest Settlement Officer who is now engaged in the definition of the rights originally admitted in those reserves.

Grazing dues and revenue on sale of grass.

32. The revenue realized from grazing dues and the sale of grass during the year compares with that of 1890-91 as follows :—

Year.	Grazing dues.	Sale of grass.		Total.
		Removed by Government agency.	Removed by purchasers.	
	Rs.	Rs.	Rs.	Rs.
1890-91 ...	29,043	...	5,668	35,011
1891-92 ...	33,917	392	1,474	35,783

The comparison shows an increase of Rs. 172, due to larger realizations in Bundelkhand, including Rs. 1,979 on account of 1892-93, and to the imposition of a prohibitive fee in the Ganges Division for such cattle as are found grazing in the reserves in excess of the number for which rights are recorded; it must further be remembered that the figures of 1890-91 included an outstanding of Rs. 6,197 of 1889-90.

Fencing.

33. The total expenditure of the Circle on fencing was Rs. 925, spent entirely in the Naini Tal Division: Rs. 807 on new fencing, and Rs. 118 on repairs to the Ránikhet reserve fence. A good deal was spent on the purchase of iron standards for the barbed wire which proved unsatisfactory. Other Divisions did no fencing work.

5.—Natural Reproduction.

Natural zones.

34. As regards natural reproduction, it seems appropriate to divide the Circle into zones and treat of each separately. The zones may conveniently correspond to the natural distribution of the tree vegetation, the elevation of the forests, and comprise—

(a) *The higher hill forests of the Naini Tal Division.*—Conifers with oaks and miscellaneous deciduous trees.

(b) *The submontane forests of the Kumaun, Garhwál, and Ganges Divisions, including the Bhábar.*—Mixed forests of sál, sain, and miscellaneous trees with bamboos.

(c) *The plains forests of the Bundelkhand Division.*—Scrub jungles of miscellaneous trees or shrubs with bamboos and a few stunted teak.

Natural reproduction in the higher hills.

35. There was again a failure of chír (*Pinus longifolia*) seed, but a plentiful supply of banj oak (*Quercus incana*). In continuation of the remarks made in paragraph 31 of last year's report, Mr. Hobart-Hampden advances the opinion that the continual restriction of grazing in the chír forests is not a *sine quâ non* for effectual natural reproduction, and would merely close such areas as are in the first stages of natural regeneration. This may no doubt be accepted where the system of regular regeneration fellings is in vogue; but where selection fellings are the rule, as at present, the forests are more or less always undergoing regeneration and in all stages. He would, however, establish a system of age classes by the French "*Mode des eclaircies,*" but the gist of his remarks lies in the advocacy of grazing after the young growth is sufficiently advanced to be out of danger, as a preventive, or at least a check on the severity, of fires, and in this regard the remarks are worthy of attention.

The chír forests of Suini and Kathallekh protected forests, comprised in the Ránikhet closure scheme, are well stocked with young healthy plants, but it is almost in the strength and size of the plants alone that the reproduction is superior to that of the open areas; and though in the closed areas it is throughout satisfactory, yet more marked superiority between the closed and open portions than actually exists would naturally have been expected.

Natural reproduction in the submontane and Bhábar forests.

36. In the Kumaun Division natural reproduction is reported to be satisfactory, except in the damp valley of the Nindhaur, where excessive moisture seems to retard its progress. Dense natural reproduction of haldu was observed along the fire lines and in the open patches in the forest where there was plenty of light and where charcoal had been made in open kilns, which, in a measure, supports the theory advanced in paragraph 46 of the report for 1889-90, that haldu does not reproduce itself naturally except on new soil.

In Garhwál the season was a bad one for sál seed, and there were consequently no seedlings of the year; the tree is, however, reported to have flowered profusely in the Ganges Division, which augurs well for the seeding now at hand. The winter was a mild one and the frost not severe; nevertheless, the young sál in the open grassy chaors, notably in the upper portion of the Kotri Dún of the Ganges Division, were all killed down. It is, however, satisfactory to be able to report, in continuation of the rather discouraging remarks of last year, that there is a fair sprinkling of chír in these chaors, which, from their hardier nature and appearance, present a striking contrast to the frost-bitten sál, and which alone, or artificially added to, may, after a few years, be most beneficial as nurses to their more susceptible neighbours and aid them to that start which they merely require to become thriving trees and capable of self-regeneration without further difficulty. Reproduction of former years in Garhwál is generally good, there being, in suitable places, an abundance of two years and older growth.

Natural reproduction in the plains.

37. In Bundelkhand the forests near the banks of streams and in valleys contain very fair natural reproduction, which, however, is almost absent in the hilly portions. Bamboo reproduction is said to be good throughout the Division, and in the Kuluha forest of the Bánda range there are large quantities, especially in the hilly tracts.

6 —Artificial Reproduction.

38 Operations in the direction of artificial reproduction in the Circle are not extensive. The total expenditure of the year on this account amounted to Rs. 2,166 against Rs 2,719 during the year previous, while the area under treatment was reduced by 109 acres.

General remarks

39 There are no regular plantations beyond the Chaubattia garden and nursery, and no addition was made to the area shown last year, which remained at 50 acres The expenditure, excluding cost of establishment, was Rs. 1,328 or Rs 13 below that of 1890-91, and was all incurred on the above nursery, which brought in a revenue from the sale of trees and fruit of Rs 1,095, being Rs 402 in excess of the previous year's figures The season was a bad one for fruit, from the sale of which only Rs. 598 were realized against an average annual revenue of Rs 1,000, and the excess was entirely due to the imposition of a small price for fruit and forest trees supplied to the general public, which, prior to December 1891, were given away free. This price is four annas and three annas for fruit trees sold to the general public and zamíndárs respectively, and three annas and one anna for forest trees. The price of the fruit trees is an arbitrary one for all kinds and should be altered The detail of the revenue is—

Regular plantations

	Rs	Rs
Sale of fruit ..	598	
Sale of 2,159 fruit and 25 forest trees ...	497	
		1,095

While the expenditure was as follows —

	Rs	Rs
Cost of apple seed ..	32	
Cost of temporary establishment and daily labour ..	1,296	
Total cost charged to A VIIId		1,328
Pay of Superintendent for six months at Rs 150 per mensem	900	
Permanent nursery establishment ...	564	
		1 464
		2 792

The net loss to Government was Rs. 1,697 against Rs 979 in 1890-91, but the latter figure does not include the cost of establishment if this is omitted, the net loss is reduced to Rs 233, so that the year's working compares favourably with that of the previous year

In addition to the sales made, the garden supplied free to District Boards and Cantonments 22,160 forest and 400 fruit trees against 11,851 and 4,138, respectively, during last year, being a large decrease in the number of fruit trees, while the grants of forest trees were almost doubled.

Owing to the death in August 1891, of Mr. Craw, who had been in charge of the gardens since 1871, and to the fact that the object for which the gardens were started, *viz*, the encouragement of fruit culture in Kumaun, was not being materially furthered through their instrumentality, and while, moreover, the District gardens at Motesar, Jalna, and Binsar are capable of meeting all demands for fruit trees, proposals were made by the Conservator in order to raise their financial position to lease the gardens, allowing the cultivation of food crops in between the trees, but at the same time ensuring proper maintenance as an orchard and a centre of supply for fruit and forest trees Ever since the gardens were established they appear to have been worked at a loss, averaging during the last 10 years Rs 3,021 per annum. The proposition was accepted by Government, but no eligible tenant has yet been found It may be observed, however, that the financial results of the year under report are better than have been obtained since 1871-72, while proper upkeep has been maintained.

The present stock of young trees, which comprises over 5,000 sweet chestnuts, compares favourably with that of the previous year, and is as follows :—

Year.	Fruit trees.	Forest trees.
1890-91	56,271	56,478
1891-92	62,332	75,236
Increase ...	6,061	18,758

The increase in fruit trees is due to an increased number of cuttings being put down, while that in forest trees is owing to more plants having been raised from seed.

Cultural operations.

40. Under cultural operations only 20 acres were added, while 129 were excluded, causing a net decrease of 109 acres and reducing the area at commencement of the year from 1,020 to 911 acres. The total expenditure amounted to Rs. 838 against Rs. 1,378 during 1890-91.

Naini Tal.—In the Naini Tal Division operations were curtailed owing to financial considerations. Rs. 84 were spent on new works in the Ránikhet Sub-Division, comprising the planting out of 1,045 Acacia in Dalmoti, 1,150 Robinia Pseudo-Acacia, and 645 Ash, and the sowing of 3½ maunds Quercus Incana seed in Dwarson, the sowing of nine seers of chír in Khaniari and of 7½ seers in Jakhdeo, the whole covering an aggregate of eight acres. Nursery work at Maúlani cost Rs. 46, while 830 failures at China and 1,140 at Jainoli were renewed, the latter with 1,090 deodar and 50 cypress, at a cost of Rs. 28. Rs. 18 were spent on relieving the deodár at Jabar from noxious growth.

Kumaun.—The Haldwani and Chorgalia forest gardens were kept up at a cost of Rs. 268.

Garhwál.—The sowing of sál and other seed in a further five acres of the Chopra plantation was continued at a cost of Rs. 4 only, but the young seedlings being eaten up by locusts, the result was a failure, and the area has accordingly been struck off again from Form 52. The plantation, although it has been burnt over, nevertheless contains a great number of small young sál trees and many larger trees of tún and shisham, the result of former sowings. It has now, however, been finally decided to discontinue operations and to leave the work to nature.

The upkeep of fruit gardens in this Division cost Rs. 137.

Ganges.—In the Ganges Division operations were confined to the maintenance of the mango groves at Haldukhata and Sanch, on which an expenditure of Rs. 137 was incurred, including a sum of Rs. 39 spent on iron fencing.

Bundelkhand.—All former areas in the Bundelkhand Division, aggregating 117 acres, have this year been excluded from Form 52 as failures, as they contain no plants. The additions of the year were seven acres sown with siris, tún, and babúl in various forests, at a cost of Rs. 79; but the seedlings dying shortly after germination, the area has been struck off again.

Rs. 37 were spent on nurseries.

7.—Early thinnings, removal of inferior species, cutting of creepers, &c.

General.

41. The only work of this nature undertaken is the cutting of climbers in the three submontane Divisions. Forty-five square miles were cut over, being a much larger area and at a somewhat lower cost than in the previous year: 37 square miles amounting to Rs. 1,310 or Rs. 35 per square mile.

Détail of Divisions.

42. The detail by Divisions is as follows :—

Division.	Areas.	Acres.	Cost. Total.	Cost. Per acre.	Remarks.
			Rs.	Pies.	
Kumaun	Jaunla Sal	2,175	...	..	Not paid for during the year.
	Sarra Nadi	2,814	...		
	Nindhaur valley ...	13,875	578	8	
Garhwál	North Patli Dun, Adnala, compartments 6, 7, and 8.	3,504	190	12	
	Dhara	4,406	300		
Ganges	Dabina, compartments 44 and 45.	445	236	20	
	Kansur, compartments 1, 11, 18, and 23.	1,834			
	Total ...	29,113	1,310		

Operations were most extensive in Kumaun, while in the Garhwál Division want of funds prevented the area proposed being cut over.

8.—Experiments and Exotics.

Measurements of the growth of sál.

43. Measurements relating to the growth of sál in various forests of the Circle have again been made and are shown in the abstract Appendix C. The average increase in the girth of the trees has been generally satisfactory, though in the unthinned area of the Lakman Mandi plot it has been counterbalanced by the falling of the bark. It will be observed that while the increase in girth is naturally much greater in the thinned than in the unthinned areas, except in the Andher Majhera plot, where it is about equal, the actual annual production of wood per acre is more on the latter than on the former.

Production of katha.

44. Experiments were carried out in the Kumaun Division with a view to ascertain the girth at which the khair tree gives the greatest yield of katha. An area of 64 acres in Guliapani was felled, and the following statement gives the results, which go to show that the smaller the girth the greater the yield, and point to coppice at a young age as the most profitable method of obtaining the raw material :—

Girth in feet.	No. of trees felled	Cubic feet solid of utilizable portion, including bark and sapwood.	Yield of katha		Yield per cubic foot.
			Mds.	Seers.	Seers.
1¼ to 2	150	306	4	25	0 60
2 to 2¾	150	478	6	10	0 52
2¾ to 3	105	464	6	8	0 52
3 to 4¼	73	425	5	8	0 49

Bark and sapwood not, however, being utilizable in the manufacture of katha, the difference in the yield in favour of smaller trees is actually greater than that shown in the statement. This result, which is entirely opposed to the present idea that trees under three feet in girth are unfit for katha, cannot, however, by any means be accepted as conclusive, and further experiments might well be undertaken, including experiments to ascertain the yield of coppice shoots.

9.—Communications, Buildings, and Other Works.

(a)—*Communications.*

Roads and bridges.

45. The work done and the expenditure incurred during the year on roads and bridges, compared with that of the previous year, was as follows :—

	1890-91.			1891-92.		
	Miles.	Chains.	Rs.	Miles.	Chains	Rs.
New cart roads	25	3	3,009	20	52	9,709
„ bridle roads and paths	90	21	3,911	54	9	1,967
Total ...	115	24	7,520	74	61	11,676
Temporary export roads under AII	75	70	1,201	69	31	985
Repairs of existing roads...	1,776	14	22,153	1,902	77	25,598
Grand Total ...	1,967	28	30,874	2,047	9	38,259

The total expenditure has been larger by Rs. 7,385, while the length of road under operations was 79¾ miles more. The chief increase in work occurs under repairs and in expenditure on new cart roads, and in the rate per mile of the latter, which has risen from Rs. 144 to over Rs. 460, mainly due to the heavy cost of the Airadeo cart road, which reached Rs. 1,535 per mile, and to bridging.

Export roads were less than in 1890-91: repairs were high owing to the widening and improvement of the old Kalagarh-Boxar cart road in the Garhwál Division, 17 miles in length, which alone cost Rs. 4,651 or Rs. 274 per mile.

The following statement gives the details by Divisions :—

Division.	New cart roads.			New paths.			Repairs.			Total A.VII.a.	Temporary export roads.			Grand total expenditure.
	Miles	Chains.	Rs.	Miles.	Chains.	Rs.	Miles.	Chains.	Rs.	Rs.	Miles.	Chains.	Rs.	Rs.
Naini Tal ...	4	40	6,910	17	60	708	127	14	1,096	8,804	...	...	...	8,804
Kumaun ...	8	3	1,745	34	50	977	467	...	5,796	8,518	18	31	166	8,684
Garhwál ...	...	35	25	1	50	192	715	64	13,283	13,500	23	62	688	14,188
Ganges ...	...	...	...	...	...	...	499	13	4,583	4,583	27	18	131	4,714
Bundelkhand ...	7	54	1,029	...	...	...	93	66	840	1,869	...	...	...	1,869
Total ...	20	52	9,709	54	9	1,967	1,902	77	25,598	37,274	69	31	985	38,259

The chief works were those mentioned above, *viz.*, the Airadeo cart road in the Naini Tal, and the improvement of the Kalagarh Boxar road in the Garhwál Division. In other Divisions the expenditure was ordinary and less than in the year previous.

(b)—*Buildings.*

Buildings of the year.

46. The work and cost of the year under buildings was—

Division.	New buildings.				Repairs and improvement.				Total.			
	1890-91.		1891-92.		1890-91.		1891-92.		1890-91.		1891-92.	
	No	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
Direction ...			...	...	...	...	1	935	...	596	1	935
Naini Tal ...			6	2,571			30	193		932	36	2,764
Kumaun	24	9,520	3	1,402	148	4,575	38	2,680	172	5,037	41	4,082
Garhwál			5	2,771			61	1,577		4,674	66	4,348
Ganges			1	2,820			20	177		2,320	21	2,997
Bundelkhand ...			1	46			40	647		531	41	693
Total ...	24	9,520	16	9,610	148	4,575	190	6,209	172	14,095	206	15,819

The total expenditure has risen by Rs. 1,724, chiefly in the Naini Tal and Ganges Divisions. There were 16 new buildings constructed against 28 in the year previous, but the cost shown, Rs. 9,610, includes in the Ganges Division Rs. 1,953 in part payment for buildings not yet completed, and in that Division Rs. 867 and in the Garhwal Division Rs. 222 on account of buildings erected last year. The average therefore shows only a slight increase. The cost of repairs was naturally higher, there being a larger number of houses to keep up. The new constructions comprised eight guards' huts and subordinates' quarters, six depôt buildings, and two bungalows, one Jhaludeo in the Naini Tal Division, and the other, Jahkan, in the Garhwál Division; one chauki in the Naini Tal Division was dismantled.

Buildings and forest inspection houses in the Circle.

47 In accordance with the request contained in paragraph 17 of the review by His Honor the Lieutenant-Governor of the report for 1890-91, the following two statements are given showing the buildings and forest inspection-houses in the Circle at the close of the year :—

Buildings

Division.	Rest houses for controlling staff.		Quarters for subordinates (excluding revenue depôts)		Offices, stores, revenue depôts		Wells		Total	
	1890-91	1891-92	1890-91	1891-92	1890-91	1891-92.	1890-91.	1891-92	1890-91	1891-92
Direction ..		...		.	1	1	.	.	1	1
Naini Tal	6	7	19	20	5	8		...	30	35
Kumaun	11	11	6	6	21	24	4	4	42	45
Garhwál	13	14	33	37	15	15	8	9	69	75
Ganges ...	11	11	2	3	7	7	3	3	23	24
Bundelkhand	5	5	34	35	1	1	1	1	41	42
Total .	46	48	94	101	50	56	16	17	206	222

In many cases out-buildings are shown separately from houses proper.

Inspection-houses.

Division.	Name of house.	Rough value	Total for Division. No.	Total for Division. Value
		Rs		Rs
Naini Tal	Kilberry	1,900	6	9,130
	Jhaludeo	2,130		
	Ninglat	300		
	Bellikh ...	1,900		
	Chanbattia . .	2,500		
	The Rauche, Naini Tal	400		
Kumaun .	Shuntra .	895	11	18,783
	Kala Deo .	1,723		
	Sanapani	1,550		
	Danda Kathauti ...	2,710		
	Dhanaur Chaor	1,090		
	Aonla Khera ...	1,325		
	Jamla Sal	491		
	Chorgalia	2,500		
	Herai .. .	1,819		
	Haldwani	3,680		
	Dechauri	1,000		

Inspection-houses—(concluded).

				Rs.		
Garhwál	South Patli Dún	Boxar ...		4,000	14	20,200
		Dhikala ...		6,000		
		Kalagarh .		700		
	Dhara ...	Jhirna ..		700		
		Amangarh ..		800		
		Maldhan ...		1,800		
	Malani ...	Dhela ..		850		
		Bijlani .		700		
		Bannagar ..		4,000		
	Chilkia ...	Mohan		2,000		
		Garjia ...		1,250		
		Garral ...		1,000		
		Jalikhan ..		1,400		
	Kota ...	Bhalou .		4,000		
Ganges	Kunaon ...	...	..	1,321	11	22,222
	Chila .	.	.	7,200		
	Laldhang ...	.	...	1,040		
	Haldukhata ...	...	...	937		
	Kotedwar ...	...	..	1,450		
	Saneh .	...	.	1,723		
	Kaluchaor ...	..	...	1,738		
	Chaukhamb	...	...	1,704		
	Hatikund ...	..	...	1,652		
	Morghati ...	...	...	1,407		
	Pakhrao ...	...	...	1,450		
Bundelkhand	Jhansi ...	Dhakwan ..		1,200	5	3,700
	Lalitpur ...	Deogarh ...		800		
		Morari ...		800		
	Bánda ..	Manikpur ..		500		
		Kulaha ...		400		
		Total .		..	47	83,045

48. Additional accommodation both for Divisional Officers and subordinates is still required at various places, especially in the Ganges Division and in the North Patli Dún, where there is, as yet, none at all. The following is a rough estimate of the requirements in this respect, which, however, will no doubt undergo considerable modification before construction as time and works proceed :—

Additional accommodation.

Division.	Inspection bungalows.	Sub-quarters	Out-houses.	Remarks.
Naini Tal	5	Several.	..	
Kumaun	1	10	8	
Garhwál	1	..	...	1 under construction.
Ganges	...	6	...	
Bundelkhand ..	1	...	...	1 sanctioned and will be built in 1892-93.

(c)—*Other Works.*

49. The following was the expenditure on other works :—

Other works.

	1890-91.	1891-92.
	Rs.	Rs.
New works	898	542
Maintenance	246	1,105
Total	1,144	1,647

The new works of the year comprised the Amdanda water supply and the construction of a well in the Garibulchand forests. The expenditure on maintenance, which largely exceeded the figures of 1890-91, was mostly incurred on the clearing and keeping in order of camping grounds.

CHAPTER IV.—OUTTURN AND WORKING.

Summary of produce removed from the forests (Forms Nos. 54 and 55 and Appendix D).

50. The total outturn of the year in timber and fuel in cubic feet solid compares with that of the previous year as follows :—

	1891-92.			1890-91.		
	Green.	Dry.	Total.	Green.	Dry.	Total.
Removed by Government Agency ...	105,020	75,790	180,810	111,418	81,795	193,213
Ditto by purchasers	1,009,034	838,038	1,847,072	871,906	1,315,692	2,187,598
Ditto under free grants .	44,839	5,538	50,377	48,169	462	48,631
Ditto by right holders ..	144,068	1,373,623	1,517,691	137,746	145,222	282,968
Total ...	1,302,961	2,292,989	3,595,950	1,169,239	1,543,171	2,712,410

These figures show a total estimated increase of 883,540 cubic feet, which is, however, entirely due to the fact that of the estimated removals of dry firewood by right-holders, entered in Appendix D of last year's report, *viz.*, 1,359,826 cubic feet, only 120,680 cubic feet were included in Form No. 54 of that year, and consequently in the statement given in paragraph 47 of the report, while for the year under review credit has been afforded in Form No. 54 for the full amount. Taking this into account, the comparison reveals a decrease of 355,606 cubic feet, of which 340,526 cubic feet is due to less removals by purchasers, chiefly from the Kumaun Division.

There was an increase in the outturn of timber of 9,980 cubic feet, and a decrease in the removals of firewood of 365,586 cubic feet.

The comparative value of minor produce removed during the last two years is—

	1891-92.	1890-91.
	Rs.	Rs.
Removed by Government Agency	8,221	3,006
Ditto by purchasers	1,83,500	1,97,472
Ditto in free grants	643	498
Ditto by right holders	1,259	1,353
Total ..	1,93,632	2,02,389

which shows that while there has been an increase of over Rs. 5,000 in the exports of bamboos by Government agency, there is a decrease in the total results of the year of Rs. 8,757, mainly attributable to smaller removals by purchasers of bamboos and other produce.

The above figures merely represent the value of the minor produce shown in Form No. 55, as was the case last year, including for that year the value of drift, Rs. 1,564, which, amounting to Rs. 1,695 in the year under report, is now omitted. If that given in Appendix D as removed in free grants and by right holders is, however, included, and it is not understood why it should not be, the total estimated value of minor produce removed from the forests during the year amounts to Rs. 2,40,789 as against Rs. 2,49,606 during 1890-91.

The outturn of bamboos, which are comprised in minor produce, decreased by 61,482 scores, the figures for the year being 15,262,903 or 763,145 scores against 16,492,541 or 824,627 scores in 1890-91, while the price, as shown by Appendix E, increased from Rs. 13·45 to Rs. 14·20 per 100 score; in a measure due, however, to the large proportion of sales of bamboos departmentally extracted.

51. The following statement, which is given in conformity with the arrangement of previous reports, represents the outturn of the year in greater detail, and introduces, among other matters, the value of each class of produce removed. Though based generally on the figures of the prescribed annual forms, many items, involving, as they do, the consideration of outstandings of revenue and of stock in hand, necessitate a good deal of calculation to arrive at correct figures, and cannot immediately be taken from the forms concerned; consequently its compilation entails a large amount of labour with which the results obtained are perhaps scarcely commensurate; at any rate an obvious improvement would lie in a change of arrangement which would place the value alongside, instead of underneath, the produce it represents.

Summary of main facts of the year's outturn and working.

No.			1891-92.	1890-91.	Increase.	Decrease.
1	Green trees felled	No.,	65,066	93,334	...	28,268
2	Outturn in timber and fuel	c. ft.	1,302,001	1,169,239	132,722	...
3	Ditto including timber from dry trees.	"	971,548	961,568	9,980	...
4	Value of above	Rs.	326,790	(a) 359,283	...	32,493
5	Outturn in green timber	c. ft.	738,463	714,227	24,236	...
6	Value of above	Rs.	240,418	278,992	...	38,574
7	Outturn of dry timber	c. ft.	233,085	247,341	..	14,256
8	Value of above	Rs.	86,372	85,291	1,081	
9	Outturn of green timber removed by departmental agency.	c. ft.	14,410	35,540	...	21,130
10	Value of above	Rs.	1,780	6,500	...	4,720
11	Outturn of green timber removed by exporters	c ft.	536,406	492,963	43,443	
12	Value of above	Rs.	197,723	226,665	..	28,942
13	Outturn of green timber removed by free grantees and right holders.	c. ft.	187,647	185,715	1,932	
14	Value of above	Rs.	40,917	40,837	80	...
15	Outturn of dry timber removed by exporters	c ft.	218,260	222,337	...	4,077
16	Value of above	Rs	82,202	78,190	4,012	...
17	Outturn of dry timber removed by free grantees and right holders.	c. ft.	14,825	25,004	...	10,179
18	Value of above	Rs.	4,170	7,101	...	2,931
19	Outturn of firewood	c. ft.	2,624,402	(b) 1,750,842	873,560	.
20	Value of above	Rs.	68,234	58,982	9,252	..
21	Outturn of fuel removed by departmental agency.	c. ft.	166,400	157,664	8,736	...
22	Value of above	Rs.	36,360	34,885	1,475	...
23	Outturn of fuel removed by purchasers ...	c. ft.	1,092,406	1,472,298	...	379,892
24	Value of above	Rs.	17,168	23,097	...	5,929
25	Outturn of fuel removed by free grantees and right holders.	c. ft.	1,365,596	(b) 120,880	1,244,716	...
26	Value of above	Rs.	14,706	1,000	13,706	...
27	Timber sold by departmental agency ...	c. ft.	12,572	(c) 8,648	3,924	...
28	Receipts from above	Rs.	1,780	(d) 2,632	...	852
29	Timber sold direct to purchasers ..	c. ft.	754,666	715,300	39,366	...
30	Receipts from above	Rs.	279,925	313,602	...	33,677
31	Fuel and charcoal sold by departmental agency.	c. ft.	(e) 169,969	164,630	5,339	...
32	Receipts from above	Rs.	(f) 36,856	35,885	971	...
33	Fuel sold direct to purchasers	c. ft.	1,092,406	1,472,298	...	379,892
34	Receipts from above	Rs.	17,168	23,097	...	5,929
35	Bamboos sold	scores	748,980	(g) 824,627	...	75,647
36	Value of above	Rs.	105,683	(h) 110,900	...	5,217
37	Value of minor produce and grazing (including driftwood, but excluding bamboos).	"	86,235	91,489	...	5,254
38	Value of other receipts	Rs.	6,088	3,614	2,474	...
39	Yield per square mile in cubic feet of timber and fuel.	c. ft.	1,932	2,183	...	251
40	Value of above per square mile	Rs.	212	238	...	26
41	Gross receipts ditto	"	287	321	..	34
42	Net receipts ditto	"	138	183	...	45

(a) Should have been Rs. 3,61,193.
(b) Omits removals by right holders entered in Appendix D.
(c) Should have been 39,413 c ft.
(d) Ditto Rs. 3,032.
(e) Includes 2,181 c ft. purchased, not shown in Form No. 54.
(f) Ditto value of (e), Rs. 496.
(g) Ditto free grants and removals by right holders, 147,040 in number.
(h) Ditto value of (g) Rs. 805.

The difference between the figures of the past year and those of the year under report brought to light by this statement will be remarked on under the appropriate heads; it will be sufficient here to note that the diminished outturn of 251 cubic feet

and smaller value of Rs. 26 per square mile, as also the average gross and net receipts, are due to an appreciable extent to the addition to the forest area of 51 square miles, of which 32 square miles are merely nominal. It may be appropriate further to mention here that of the total revenue of the year, Rs. 14,872 in the Ganges Division was received from District forests not included in the area under the Department.

Method of felling and agency of export.

52. The following two statements classify the outturn of green timber and fuel under the different methods of felling and with regard to the agency used in felling and export :—

I.—Description of felling and outturn in green timber and fuel.

	1891-92.		1890-91.		Increase.		Decrease.	
	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	C. ft.
Regeneration fellings.								
(1) Selection	32,344	892,037	44,981	772,009	...	120,928	12,637	...
(2) Coppice with standards .	48	761	152	14,017	...	...	104	13,256
(3) Strip	3,990	62,218	9,343	54,410	...	7,808	5,353	...
Amelioration.								
(1) Improvement ...	5,416	167,557	16,945	167,327	...	230	11,533	...
(2) Thinnings	9,270	76,604	5,369	78,189	3,901	...	...	1,585
Total fellings for sylvicultural purposes.	51,068	1,200,077	76,794	1,085,952	...	114,125	25,726	...
Unclassed fellings.								
(1) Clearances on boundary lines, fire lines, and roads.	13,998	102,884	16,540	83,287	...	19,597	2,542	...
Grand Total ...	65,066	1,302,961	93,334	1,169,239	...	133,722	28,268	...

II.—Agency employed in felling and in the export of green timber and fuel.

	1891-92.		1890-91.		Increase.		Decrease.	
	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	C. ft.
Government.								
Regeneration (selection fellings)	1,890	81,270	9,572	93,229	...	...	7,682	11,959
Amelioration (thinnings) ..	267	3,700	325	2,794	...	906	58	...
Unclassed fellings ...	985	20,050	472	15,395	513	4,655	...	...
Total ...	3,142	105,020	10,369	111,418	...	...	7,227	6,398
Purchasers.								
Regeneration (selection fellings)	25,670	707,987	30,596	582,684	...	125,303	4,926	...
Ditto (coppice with standards).	48	761	152	14,017	...	...	104	13,256
Strip fellings	3,990	62,218	9,343	54,410	...	7,808	5,353	...
Amelioration improvement fellings.	5,416	167,557	16,945	167,231	...	326	11,529	..
Amelioration (thinnings) ...	3,686	5,407	871	13,224	2,815	...	...	7,817
Unclassed fellings ...	3,117	65,104	9,616	40,340	...	24,764	6,499	...
Total ...	41,927	1,009,034	67,523	871,906	..	137,128	25,596	...
Right-holders and grantees.								
Regeneration (selection fellings)	4,784	103,680	4,813	96,096	...	7,584	29	...
Amelioration improvement fellings	...	...	4	96	...	...	4	96
Amelioration (thinnings) .	5,317	67,407	4,173	62,171	1,144	5,326	...	..
Unclassed fellings ...	9,896	17,730	6,452	27,552	3,444	...	...	9,822
Total ...	19,997	188,907	15,442	185,915	4,555	2,992	...	...
Grand Total ..	65,066	1,302,961	93,334	1,169,239	...	133,722	28,268	...

Selection fellings took place in all Divisions, strip fellings in the Rehar forest in Garhwál, amelioration thinnings in Naini Tal and Kumaun, improvement fellings in Kumaun and Garhwál, and unclassed fellings in all but Bundelkhand. Departmental operations were confined, as regards timber, to the Bundelkhand Division, and, as regards fuel, to the Bundelkhand and Naini Tal Divisions.

Number and kind of trees felled.

53. The following shows the number and kind of trees felled :—

	1891-92.		1890-91.		Increase.		Decrease.	
	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	C. ft.
Sál	18,746	270,677	26,629	300,257	...	...	7,883	29,580
Sain ...	1,822	48,578	3,654	75,855	...	...	1,832	27,277
Shisham ...	242	6,242	662	18,060	...	...	420	11,818
Tun	35	440	2	26	33	414	...	...
Haldu	695	30,131	897	30,570	...	...	192	439
Chir	7,325	315,874	6,902	266,183	423	49,691	...	...
Oak	4,108	220,954	2,608	205,811	1,490	15,043	...	...
Miscellaneous ..	32,093	410,165	51,989	272,477	...	137,688	19,896	...
Total ...	65,066	1,302,961	93,334	1,169,239	1,955	202,836	30,223	69,114
Net increase or decrease	...	...	...	...	...	133,722	28,268	...

While 28,268 fewer trees were felled, the outturn rose by 133,722 cubic feet; in other words, the average yield per tree was 20 cubic feet during the year under report against 12 cubic feet during 1890-91. This volume, however, includes poles and small trees obtained from thinnings and improvement fellings, and in the case of large trees mainly represents the cubic contents in sawn timber and not the true volume of the tree.

Details by Divisions.

54. For purposes of comparison the 1,359,826 cubic feet of firewood entered in Appendix D of last year's report, less the 120,680 cubic feet shown in Form No. 54 for that year, have been distributed over Divisions in the same proportion as given in Form No. 54 for the year under report.

Further, the value of minor forest produce wherever remarked on in this paragraph is exclusive of the value of bamboos, which latter produce is separately treated of, while the value of driftwood noted in paragraph 50 is included in the figures of the previous year and excluded from those of the year under report.

Naini Tal.—The outturn of timber was 2,48,332 cubic feet, or 32,267 cubic feet in excess of last year's figures. Fuel also showed an increase of 42,390 cubic feet, the output reaching 596,976 cubic feet against 554,586 cubic feet in 1890-91. The increase is due to better sales of timber trees and of trees for lime burning and fuel for the Brewery, and to larger departmental deliveries of fuel to the Commissariat Department. There was a slight increase in the removals of both bamboos and minor produce.

Kumaun.—Sixty-five thousand nine hundred and ten cubic feet timber and 341,327 cubic feet fuel less were exported than during the previous year; the figures were for timber 180,892 cubic feet against 246,802 cubic feet, and for fuel 1,010,255 cubic feet against 1,351,582 cubic feet. This large decrease in the outturn is attributable to restricted fellings in the Nindhaur Working Circle consequent on excesses of previous years and to the extension of railway communication towards Pilibhít, bringing the private forests in Oudh into competition with the Eastern Kumaun forests and rendering the disposal of thinnings from Dulagadh and of the material obtained from the restoration fellings in Jaunla Sál more difficult. The late commencement of the season and the difficulty of procuring carriage further operated in reducing the exports of

the year, which also fell short in bamboos by 721,940, the number removed being only 13,30,580 against 20,52,520 during 1890-91 Removals of minor produce also declined considerably, and the value realized was Rs. 9,341 below the figures of the previous year, which, it must be remembered, comprised a sum of Rs. 5,000 pertaining to the year 1889-90. There was, therefore, only a real difference of some Rs 4,000

Garhwál.—Although the outturn of timber rose by 20,258 cubic feet, from 269,400 cubic feet to 289,658 cubic feet, it would have been still greater had not the large accumulation of dry timber necessitated the temporary cessation of strip fellings in the Rehar Working Circle, which extended only over 15 acres, but which, however, operated to increase the export of dry material. Against this increase there was, however, a reduction in the removals of firewood by purchasers, which declined as much as 29,213 cubic feet, the figures being 532,124 cubic feet against 561,337 cubic feet. Further, owing to scarcity of carriage, 1,65,220 fewer bamboos were also exported, and the value of other minor produce decreased by Rs 1,619, from Rs 14,048 to Rs 12,429, or, excluding the value of drift, by Rs. 219 only

Nevertheless the results of the year's working were on the whole good.

Ganges.—The record of this Division is also satisfactory, although the outturn in both timber and fuel was less than in the previous year, the former by 17,893 cubic feet and the latter by 32,296 cubic feet, the figures being respectively 163,000 and 452,779 cubic feet, as against 180,893 and 485,075 cubic feet. The export of bamboos also fell short by 616,007, while the value of other minor produce showed a satisfactory increase of Rs 503, having risen from Rs 13,572 to Rs. 14,075. No explanation of the diminished outturn has been given by the Divisional Officer.

Bundelkhand.—Most satisfactory progress has to be recorded in the Bundelkhand Division, to some extent, no doubt, due to direct and separate management. The outturn in timber almost doubled itself, having risen from 48,408 cubic feet to 89,666 cubic feet, or by 41,258 cubic feet, there was, however, a slight diminution in the removals of firewood, which fell by 5,140 cubic feet, from 37,408 cubic feet to 32,268 cubic feet, though this was fully compensated for by the large increase in the exports of bamboos This increase reached 2,69,029, the output being 8,01,370, compared with 5,32,341 in 1890-91, and the improvement was mainly due to the formation of depôts at the chief centres of Allahabad, Cawnpore, and Jhánsi, instead of relying on local sales, an experiment which apparently has fully justified itself The disposals of other minor produce also showed most favourable results, the value being enhanced by as much as Rs. 3,142 and standing at Rs 17,606 as against Rs. 14,164 during the preceding year.

Chapter V.—FINANCIAL RESULTS

General summary.

55. The following statement shows the financial results of the year compared with those of the previous year and the average of the past six years —

Year	Area	Gross revenue	Expenditure			Net surplus	Revenue and expenditure per square mile					Percentage of expenditure on gross revenue		
			Conservancy and works	Establishment	Total		Gross revenue	Conservancy and works	Establishment	Total	Surplus	Conservancy and works	Establishment	Total
	Sq mls	Rs.	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	%	%	%
1885 86 to 1890-91	1,790	5,31,294	1,44,340	1,12,831	2,57,171	2,74,123	297	81	63	144	153	27	21	48
1890-91	1,810	5,80,384	1,42,656	1,06,912	2,49,568	3,30,816	321	79	59	138	183	25	18	43
1891-92	1,861	5,33,274	1,55,988	1,20,378	2,76,366	2,56,908	287	84	65	149	138	29	23	[illegible]

The surplus of the year amounted to Rs. 2,56,908, which, though Rs. 73,908 less than that of the last year, is only Rs. 17,215 below the average surplus of the past six years. The reason of this smaller surplus is explained in the following paragraphs.

Revenue (Form No. 58).

56. The total revenue was Rs. 5,33,274 against Rs. 5,80,384 in 1890-91, showing a decrease of Rs. 47,110. Of this decrease, however, no less than Rs. 30,530 is merely nominal, being due to the credit in 1890-91 of Rs. 24,215 pertaining to the year 1889-90 and of Rs. 6,315 on account of produce exported in 1891-92. The decrease occurred almost entirely in the Kumaun Division, and, in addition to the above, in the export of timber, firewood, and bamboos already remarked on in paragraph 50, and while not only was the quality of the timber supplied inferior, but the price realized for firewood was only one-half the usual rates owing to the small demand. The only increase of any moment occurred under miscellaneous receipts and in the sale of bamboos, extracted departmentally, in the Bundelkhand Division.

Expenditure (Form No. 58).

57. The total expenditure of the year has increased by Rs. 26,798, and amounted to Rs. 2,76,366 against Rs. 2,49,568 last year; it exceeded the average of the past six years by Rs. 19,195, and is the highest incurred since 1886-87.

The increase is divided equally between "A. Conservancy and Works" and "B. Establishments." Under "Conservancy and Works" Rs. 9,325 were due to improved communications and buildings, chiefly the former; there has also been a larger expenditure of Rs. 4,062 on fire protection, and of Rs. 3,953 due to increased departmental removals of bamboos in Bundelkhand. Under "Establishments" the increase occurred almost entirely in the salary and travelling allowances of superior officers, and was in consequence of promotions, the transfer of Mr. Down, the appointment of Mr. Leete, and of the return to the Garhwál Division of Colonel Campbell.

The reductions in expenditure were small and of little moment; they amounted to Rs. 7,461 under head "A." and to Rs. 3,328 under "B."

Detail by Divisions.

58. The statement below gives the financial results of the year for each Division :—

Division.	Receipts.		Charges.		Surplus.		Deficit.		Percentage of charges on receipts.		Difference.		
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	Receipts.	Charges	Net results.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs			Rs.	Rs.	Rs.
Direction ...	15	1	22,408	22,847	...	...	22,393	22,846	...	...	—14	+439	—453
Naini Tal ...	59,193	63,711	46,518	53,291	12,675	10,420	...	...	78·58	83·64	+4,518	+6,773	—2,255
Kumaun ...	1,70,670	1,14,891	50,989	53,301	1,19,581	61,590	...	...	29·89	46·39	—55,679	+2,312	—57,991
Garhwál ...	1,81,012	1,91,504	63,507	72,244	1,17,505	1,09,260	...	...	35·08	39·80	+402	+8,737	—8,245
Ganges ...	1,47,804	1,42,794	47,692	50,022	1,00,112	92,772	...	...	32·26	35·03	—5,010	+2,330	—7,340
Bundelkhand	21,790	30,373	18,454	24,031	3,336	5,712	...	...	84·69	81·13	+8,583	+6,207	+2,376
Total ...	5,80,384	5,33,274	2,49,568	2,76,366	3,59,209	2,79,754	22,393	22,846	43·00	51·82	—47,110	+26,798	—73,908

Compared with the figures for 1890-91, all Divisions, except Bundelkhand with a small increase of Rs. 2,376, show a smaller surplus, notably the Kumaun Division, which amounts to so much as Rs. 57,991.

The Garhwál Division has regained its position at the head with the largest surplus and the highest gross revenue, while the Kumaun Division has, in both respects, yielded the second place to the Ganges Division.

The large falling off of revenue in the Kumaun Division, which amounts to Rs 55,679, is attributable to the accounts entries mentioned in paragraph 56 and to less exports of timber and firewood, bamboos, and minor produce, as explained in paragraph 54, and to the poorer quality of the timber and reduced rates for firewood.

In the Naini Tal Division, an increase of Rs 4,518 in the total revenue, but chiefly under sales of timber removed by purchasers, was counterbalanced by the large expenditure of Rs 11,568 under roads and buildings, which exceeded that of the previous year by Rs 8,035

In Bundelkhand there was an increase of Rs 8,585 mainly under sales of bamboos by Government agency, already alluded to, grazing and removals of grass by purchasers, consequent on the recent change in management.

Financial results (Form No 62)

59 The receipts and charges, together with the resulting surplus or deficit under the three main heads of account for the last two years, were—

	Receipts				Charges				Surplus or deficit			
	1890 91	1891 92	Increase in 1891 92	Decrease in 1891 92	1890-91	1891 92	Increase	Decrease	1890-91 Surplus	1890-91 Deficit	1891 92 Surplus	1891 92 Deficit
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs.
I —Departmental operations	42,584	44,451	1,867	...	31,320	35,736	4,416	..	11,264	...	8,715	...
II —Other revenue	5,37,800	4,88,823	...	48,977	1,05,085	1,15,076	9,991		4,32,715	.	3,73,747	
III —Protection ..	...	...	.		1,13,163	1,25,554	12,391	...	..	1,13,163		1,25,554
Total	5,80,384	5,33,274		47,110	2,49,568	2,76,366	26,798		3,30,816	.	2,50,908	

Thus 24 per cent. of the gross revenue of the year has been spent on protection and improvement of the forests against 20 per cent during the year previous, further, of the year's expenditure on this account 42 per cent alone was incurred on roads and buildings.

Revenue and expenditure under Budget heads

60 The following table compares the totals of receipts and expenditure under each Budget head with those of the previous year —

Receipts.

Year	Budget heads I.	II	III	IV	V	Total.
	Rs	Rs	Rs	Rs	Rs	Rs
1890 91	42,584	5,32,607	1,564	15	3,614	5,80,384
1891-92 . ..	44,451	4,81,040	1,695	...	6,088	5,33,274
Increase in 1891 92 ...	1,867	...	131	...	2,474	...
Decrease in 1891 92 ...		51,567	..	15	..	47,110

Expenditure.

Year.	A—Conservancy and Works										B—Establishments.				Grand total, A and B.
	Budget heads									Total.	Budget heads				
	I	II	III	IV	V.	VI	VII	VIII	IX.		I	II.	III.	Total.	
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs.	Rs	Rs	Rs	Rs	Rs.	Rs.
1890-91 ...	21,278	27,087	...		589	13,602	44,911	33,434	1,755	1,42,650	87,890	13,100	5,922	1,06,912	2,49,562
1891-92	23,631	26,387	6	...	507	13,157	54,740	36,193	1,367	1,55,088	97,723	15,419	7,236	1,20,378	2,75,366
Increase in 1891-92	2,393		6	.	.	...	9,829	2,759	.	14,332	9,833	2,319	1,314	13,466	26,798
Decrease in 1891-92		700	...	.	32	545	...	...	388	...		...	...		...

Value of timber and live and dead stock (Forms Nos 57A and B).

61. The difference in the value of timber and other produce and of live and dead stock in hand at the beginning and at the close of the year was—

	Timber, &c	Live and dead stock.
	Rs.	Rs
Value on 1st April 1891	4,497	1,60,160
Ditto on 31st March 1892	6,617	1,78,828
Balance in favour of the year ..	2,120	18,668

Outstandings of revenue (Form No 60).

Outstandings against contractors and disbursers (Form No. 61)

62. The outstandings on account of revenue have decreased from Rs. 2,504 at the commencement to Rs 1,120 at the close of the year, while those due from contractors and disbursers stood as follows :—

	Contractors.	Disbursers.	Total.
	Rs	Rs.	Rs.
On 1st April 1891			5,415
On 31st March 1892	558	4,683	5,241

Net result of the year's transactions.

63 The value of the transactions of the year compares with the average of the past four years as under :—

	Rs
Cash surplus (Form No. 58)	2,56,908
Add—	
Increased value of stock at depôts (Form No 57A)	2,120
	2,59,028
Deduct—	
Decrease on revenue outstanding (Form No 60)	1,383
Total in favour of the year ..	2,57,645
Average of past four years	3,13,850

There appears, however, to be a slight error in the manner in which this account has been struck in former years

CHAPTER VI.—GENERAL REMARKS.

Supply of firewood to the station of Naini Tal.

64 Although the suggestions for the improvement of the supply of firewood to the residents of Naini Tal, given in paragraph 61 of last year's report, have been duly carried out, and, as remarked on in paragraph 14, improvement fellings instituted in the forests in the vicinity of the station, there has as yet, however, been no change in the method of supply, and indeed

from a study of the question it seems that all that is really necessary is for the Department to insist on a fair price for produce coming from its forests, to restrict the collection to personal requirements of the ticket-holder and to one load a day, and to put a stop to sales on his own account by the actual wood-gatherer. At present the Department disposes of some 90 maunds for the rupee, while the bazar rate is 4 maunds The issue of non-transferable season tickets at a slight reduction on the monthly rate would also be an advantage both to the public and the Department.

Working of bamboo forests.

65. The results of the working of the bamboo forests have continued satisfactory, and the system of a two years' rotation has been extended to all Divisions The rule regulating the height at which the culms are to be cut has not, however, been strictly enforced, partly by reason of its ambiguity, and a revision has been proposed by the Ganges Divisional Officer by which the extraction of all bamboos that cannot be cut at a height not exceeding one foot from the ground would be absolutely forbidden The procedure may involve a temporary diminution of revenue, but the benefit that must eventually arise therefrom far outweighs any present money considerations.

Denudation of forests at Almora.

66 The rapid denudation of the hill sides around Almora was brought to notice by the Deputy Conservator, Naini Tal Division, and the matter will be placed before the Commissioner.

Relations between District and Forest Officers

67 The relations between District and Forest Officers have been all that could be desired, and the Bundelkhand Divisional Officer warmly acknowledges the help and sympathy he has received from the Revenue Officers of the Jhánsi, Lalitpur, and Banda districts

A E WILD,
Conservator of Forests, Central Circle,
N.-W. Provinces and Oudh.

NAINI TAL:
The 16th July 1892.

ANNUAL STATEMENTS

AND

APPENDICES.

[Form No. 49.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF RESERVED FORESTS, 1891-92.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of Notification of addition or transfer.
Naini Tal.	China	Naini Tal ...	Naini Tal Reserve { Kota ... ... ; Fatehpur ... . ; Deohauri ... . }	15,570	24	...	..	15,570	24	No. 818F./130A-3? dated 6th November 1891.
	Ditto		Dolmar-Mora—I Dolmar-Mora	...	..	6,400	...	6,400	10	
	Hinnan ...		Gagar-Nigiat	11,853	19	..	...	11,853	19	
	Ránikhet	Almora	Ránikhet Reserve	4,934	8	...	3	4,931	8	G. O. No. 15?F./357A-9 dated 22nd February 1892.
			Total ...	32,357	51	6,400	3	38,754	61	
Kumaun.	Deohauri ...	Naini Tal	II. Deohauri	17,754	28	..	...	17,754	28	No. 818F./22-110A dated 6th November 1891.
	Fatehpur .		III. Fatehpur	29,002	45	...	...	29,002	45	
	Ditto ..		Dolmar-Mora—II Baluiti	.	...	3,848	...	3,848	6	
	Chaklata ...		IV. Chakhata	59,884	93	...	...	59,884	93	
	Ditto ...		V. Horai	4,400	7	...	..	4,400	7	
	Chaubhainsi ...		VI. Chaubhainsi	132,233	207	...	...	132 233	207	
	Ditto ..		VII. Jaunia Sál	42,708	67	...	..	42,708	67	
	Kalonia ...		VIII. Kalofia	4,286	7	...	...	4,286	7	
	Sarda ...		IX. Chini	4,387	7	...	...	4,387	7	
	Ditto ...		X. Sarda Islands	3,491	5	...	...	3,491	5	
	Ditto ...		XI. Chandani	403	1	...	..	403	1	
			Total ...	293,548	467	3,848		302 396	473	
Garhwál.	Patli Dún ...	Garhwál ...	Reserve No. 1, Kotri Dún Block, Kalagarh ..	19,387	30	..	...	19,387	30	
	Ditto ...		Ditto " 2, Patli Dún	133,558	209	...	...	133,558	209	
	Ditto ...		Ditto " 3, Kartia	847	1	...	...	847	1	
	Chilkia and ..	Naini Tal ...	Ditto " 4, Chilkia	82,685	129	...	...	82,685	129	
	Kota ...		Ditto " 5, Kota	43,022	67	...	...	43,022	67	
	Ditto ..		Ditto " 6, Dabka	7,141	11	...	.	7,141	11	
	Dhara ...	Bijnor ...	Ditto " 7, Garhibulchand	11,098	17	...	...	11,098	17	
	Ditto ...		Ditto " 8, Behar	16,619	26	...	...	16,619	26	
			Total ...	314,357	491	...	...	314,357	491	

Form No. 49.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF RESERVED FORESTS, 1891-92—(*concluded*).

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1892. Acres.	Area on 31st March 1892. Equivalent in square miles.	Number and date of Notification of addition or transfer.
Ganges.	Palain	Garhwál... ...	Palain Reserves	19,609	31	(a) 13,683	...	33,292	52	
	Kohtri		Kohtri Reserve	92,975	145	(a) 4,830	...	43,710	68	
	Sona nadi ...		Sona nadi do.					54,095	84	
	Udepur . ..		U'depur Reserves	32,215	50	(a) 20,388	...	52,603	82	
	Gohri		Gohri Reserve	96,757	151	..	(a)18,086	39,822	62	
	Ditto	Bijnor	Chandi					38,849	61	
	Lansdowne ...	Garhwál ..	Lansdowne	15,507	24	...	...	15,507	24	
			Total ...	257,063	401	38,901	18,086	277,878	434	
Bundelkhand.	Jhánsi	Jhánsi	Jhánsi Reserves	30,602	48	...	...	30,602	48	
	Lalitpur ...	Ditto	Lalitpur „	89,908	140	...	...	89,908	140	
			I.—Bánipur	...	...	16,220	...	16,220	25	
			II.—Chauri Donda	...	...	14,967	...	14,967	23	
	Bánda	Bánda	III.—Manikpur	...	...	10,899	...	10,899	17	No $\frac{71 \text{ F}}{24\text{-}91}$. dated 28th September 1891.
			IV.—Matdar	...	...	6,729	...	6,729	11	
			V.—Kolhua	..	...	6,182	...	6,182	10	
			Total ...	120,510	188	54,997	...	175,507	274	
			GRAND TOTAL ...	1,022,835	1,598	104,146	18,089	1,108,892	1,733	

(a) Revision of area as furnished by Forest Survey Department.

ABSTRACT OF CHANGES DURING THE YEAR.

	Acres.		Acres.
Area at commencement of year			1,022,835
Added :—	Acres.		
By correction of areas	38,901		
„ reservation of unclassed forests	54,997		
„ ditto of new areas	10,248	1,04,146	
Excluded :—			
By correction of areas	18,086		
Under section 26 of the Forest Act	3	18,089	
		Net increase ...	86,057
Area at close of year			1,108,892

[Form No. 49.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

AREA OF PROTECTED FORESTS, 1891-92.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads	Area on 31st March 1892.		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles	Acres.	Acres.	Acres.	Equivalent in square miles.	
Naini Tal ...	China ...	Naini Tal ...	China							
	Ditto ...		Budlakot							
	Ditto ...		Nalena							
	Hinnan ...		Bhawali	19,442	30	...	...	19,442	30	
	Ditto ...		Jakh							
	Ditto ...		Laria Kanta							
	Ditto ...		Kuria							
	Siuni ...	Almora ...	Machor	146	...	...	...	146	...	
	Do. ...		Bhatronj	5,828	9	...	...	5,828	9	
	Do. ..		Siuni	4,432	7	...	...	4,432	7	
	Do. .		Siun	700	1	...	...	700	1	
	Do. ...		Belekh	942	1	...	...	942	1	
	Do. ..		Kathallekh	1,812	3	...	...	1,812	3	
	Ránikhet ...		Ganiadeoli	889	1	...	...	889	1	
	Ditto ..		Karchuli	215	...	...	...	213	...	
	Ditto ...		Chilianao	630	1	...	...	630	1	
	Ditto ...		Chaubattia	1,208	2	...	...	1,208	2	
	Ditto ...		Padholi	957	2	...	52	905	2	No. $\frac{\text{38 F.}}{\text{2 of 91.—19}}$, dated 23rd March 1892.
	Ditto ...		Dwarson	1,519	2	...	...	1,519	2	
	Ditto ...		Deolikhet	20	...	...	..	20	...	
	Ditto ...		Siahi Devi	2,064	3	...	...	2,064	3	
	Ditto ...		Aira Deo	16,757	26	...	...	16,757	26	
			Total ...	57,559	90	...	52	57,507	90	
Bundelkhand ...	Lalitpur ...	Jhánsi ...	Talbehat	2,362	4	...	...	2,362	4	
			GRAND TOTAL ...	59,921	94	...	52	59,869	93	

Abstract of changes during the year.

	Acres.
Area at commencement of year	59,921
Excluded by transfer to Ránikhet Cantonment	52
Area at close of year	59,869

[Form No. 49.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

AREA OF UNCLASSED FORESTS, 1891-92.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of Notification of addition or transfer
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Ganges	Kotri	Garhwál	Lalpani	...	...	(a) 1,500	...	1,500	2	
	Udepur	Ditto	Panwali	...	...	(a) 550	.	550	1	
			Total	...	...	2,050	.	2,050	3	
			I.—Ránipur-Kalianpur.							
			Mau	385 53	...	...	385	...	...	No $\frac{71^{\text{TF}}}{397}$, dated 28th September 1891.
			Unchadih	413 88	...	...	414	...	...	
			Sakrawan	644 80	...	...	645	...	..	
			Ránipur Kalianpur	2,697 84	...	...	2,698	...	...	
			Mamauna or Katauta	2,250·24	...	...	2,250	...	.	
			Gudurha	221 66	...	...	222	...	...	
			Ukian	714 02	...	...	714	...	...	
			Rajuhan	4,618 80	.	...	4,619	...	...	
			Deori	4,273 31	...	...	4,273	...	...	
			Nihi	2,109·61	...	...	...	2,109	...	
			Maholi	948 76	...	...	...	949	...	
			Kalianpur	2,670 66	...	...	...	2,671	...	
			Total	21,949 11	34	...	16,220	5,729	9	
Bundelkhand	Bánda	Bánda	*II.—Chauri Donda.*							
			Karauhan	728 43	...	...	...	729	...	Ditto.
			Sikapur Chat Ghati	69 43	...	...	...	69	...	
			Jaro or Jaro Muafi	1,139·94	...	...	1,140	...	...	
			Chauri	4,036 70	...	...	4,037	...	...	
			Chulha	1,502 38	...	...	751	751	...	
			Parasin or Kulmar Parasan	3,623 30	...	...	3,623	...	...	
			Donda	5,416 14	...	...	5,416	...	...	
			Total	16,516 32	26	...	14,967	1,549	2	
			III.—Manikpur.							
			Chulhi	1,621 92	...	...	1,622	...	...	Ditto.
			Mahál Bal Kishn of Chulhi village.	26 25	...	...	..	26	..	
			Carried forward	1648 17	...	...	1,622	26	...	

[Form No. 49.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH WESTERN PROVINCES AND OUDH.

AREA OF UNCLASSED FORESTS, 1891-92—(*concluded*).

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891.		Added during the year	Excluded or transferred to other heads.	Area on 31st March 1892		Number and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles	
Bundelkhand.—(*concluded*).	Bánda ...	Bánda ...	Brought forward ...	1,648 17	...	...	1,622	26	...	
			III—Manikpur.							
			Mahál Makhramgir of Chulha village.	13 00	...	...	.	13	...	
			Ambha ...	2,242 77	...	...	2,243	...	...	No. 713F/34-97, dated 28th September 1891.
			Karkpadri or Pandria ..	730 93	...	...	731	...	.	
			Chhera kalan	1,237 83	...	...	1,238	...	...	
			Amchor Narwa ...	4,216 66	...	...	4,217	.	.	
			Rukma khurd	132 62	...	...	132	...	...	
			Area outside forest line ...	716 00	...	...	716	..	.	
			Total ...	10,937 98	17	..	10,899	39	..	
			IV—Tikaria.							
			Bhenda or Bhera ...	777 96	...	...	...	778	..	
			Dadri muafi ...	4,697 00	...	. .	...	4,697		
			Tikaria gamanhai .	2,892 39	.	...		2,892	...	
			Gursarai	906 43	...	...	...	909	. .	
			Rukma Buzurg ...	1,978 21	.	...	...	1,978	...	
			Marwa Panwari or Mandayan Panwari.	1,885 68	...	.	...	1,886	...	
			Total ...	13,139 67	21		...	13,140	21	
			V—Matdar	6,729 10	10		6,729			Ditto
			VI—Koluhs .	6,182 00	10	-	6,182		...	Ditto
			GRAND TOTAL ...	75,454 18	118	2,050	54,997	22,507	35	

(a) transferred from District Forests, G O $\frac{715}{214-A-6}$, dated 10th April 1891.

Abstract of changes during the year.

				Acres.
Area at commencement of year	...	...	...	75,454
Added —				
By transfer from District Forests	...	...	...	2,050
Excluded —				
By transfer to reserves	...	. .	. .	54,997
Net deduction		...	...	52,947
Area at close of year			...	22,507

[Form No. 50.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

REGISTER OF BREACHES OF FOREST RULES DURING 1891-92.

Forest Division.		Cases pending from 1890-91.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Naini Tal ... Naini Tal Sub-Division,	A.	...	1	1	...	1	3	3	1	1	2	3	3	4	...
	B.	...	12	230	2	1	245	245	245	353	...	...	245	353	...
Ránikhet Sub-Division ...	A.	7	11	2	...	1	14	21	9	9	12	130	21	139	...
	B.	...	6	75	4	...	85	85	85	223	...	...	85	223	...
Total ...		7	30	308	6	3	347	354	340	586	14	133	354	719	...
Kumaun	A.	...	...	1	1	...	2	2	1	11	1	1	2	12	...
	B	...	2	13	1	31	47	47	47	114	...	...	47	114	...
Total ...		...	2	14	2	31	40	49	48	125	1	1	49	126	...
Garhwál	A.	...	...	...	...	1	1	1	1	4	...	...	1	4	...
	B.	...	...	25	...	30	55	55	55	177	...	...	55	177	...
Total ...		...	...	25	...	31	56	56	56	181	...	...	56	181	...

Ganges	A.	...	...	1	...	...	1	1	1	1	...	...	1	1	...
	B.	18	...	41	...	52	93	111	96	192	...	...	96	192	15
Total ...		18	...	42	...	52	94	112	97	193	...	...	97	193	15
Bundelkhand	A.	...	...	15	...	...	15	15	12	20	3	3	15	23	...
	B.	...	...	14	2	2	18	18	15	41	3	4	18	45	...
Total ...		...	...	29	2	2	33	33	27	61	6	7	33	68	...
GRAND TOTAL ...	A.	7	12	20	1	3	36	43	25	46	18	137	43	183	...
	B.	18	20	398	9	116	543	561	543	1,100	3	4	546	1,104	15

N.B.—A. means cases taken into Court.

B. means cases disposed of under section 67 of Indian Forest Act, 1878.

[Form No 51.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON, 1892,—TO ACCOMPANY REPORT FOR 1891-92.

Division.		Forest Tracts.	Year in which protection commenced.	Area actually protected up to 30th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
					Area attempted to be protected.	Failures.	Actually protected.		
		I.—Areas under special protection.						Rs.	
Naini Tal Division.	Naini Tal Sub-Division,	Naini Tal protected forest	1876	19,392	19,442	741	18,701	558	
		Ditto reserve ditto	1886	15,570	15,570	85	15,485	341	
		Gagar Ninglat reserve	1888	11,613	11,853	882	10,971	437	
		Dolmar-Mora ditto	1891	3,660	3,660	7	6,393	83	
		Ditto ditto	1892	...	2,740				
		Total ...	...	50,235	53,265	1,715	51,550	1,419	
	Ránikhet Sub-Division,	Ránikhet reserve	1874	4,929	4,931	14	4,917	151	
		Padholi protected forest	1882	957	905	8	897	20	
		Chaubattia ditto	1882	1,208	1,208	50	1,158	24	
		Karchuli ditto	1885	213	213	...	213	14	
		Ganindeoli ditto	1878	889	889	...	889	34	
		Kathallekh ditto	1878	1,812	1,812	27	1,785	62	
		Siuni ditto	1880	4,432	4,432	344	4,088	146	
		Siun ditto	1885	700	700	...	700	27	
		Dwarson ditto	1888	1,519	1,519	9	1,510	14	
		Bellekh ditto	1888	942	942	601	341	13	
		Bhatronj ditto	1888	2,500	726	...	726	25	
		Chillianao ditto	1884	623	630	11	619	22	
		Airadeo ditto	1891	13,757	16,757	2,358	14,399	393	
		Sinhi Devi ditto	1888	...	1,502	923	579	17	Last year under II.—Areas protected by the ordinary establishment.
		Total ...	...	34,481	37,166	4,345	32,821	962	
		Total, Naini Tal Division ...	...	84,716	90,431	6,060	84,371	2,381	

	Dechauri Range.							
	Sanani block ...	1890	3,036	3,036	24	3,012		
	Kalianpur ditto	1991	2,577	2,710	97	2,613		245
	Dhamola ditto ...	1891	1,310	1,310	...	1,310		
	Fatehpur Range.							
	Bhakra block ...	1888	2,391	2,391	...	2,391		231
	Mona ditto ...	1890	4,126	4,126	...	4,126		
	Chakhata Range.							
	Horai ...	1876	4,290	4,290	609	3,681		
	Lakhman Mandi	1883	2,049	2,049	...	2,049		
	Jampokhra ...	1890	3,009	3,009	...	3,009		1,165
	Patrani ...	1890	2,730	2,730	...	2,730		
	Asni ...	1890	2,415	2,415	...	2,415		
	Chaubhainsi Range.							
	Nindhaur Beat—							
	Nindhaur ...	1882	25,305	25,305	...	25,305		
KUMAUN DIVISION ...	Karakot ...	1890	3,444	3,444	...	3,444		
	Jaula Sál Beat—							
	Jáula Sál ...	1876	7,528	7,592	34	7,558		2,801
	Chungad ...	1890	5,313	5,313	...	5,313		
	Hatgad ...	1890	3,811	3,858	...	3,858		
	Ditto ...	1892	...	30	...	30		
	Chamundhunga ...	1890	4,985	4,935	...	4,935		
	Kalonia Range.							
	Sarra valley ...	1889	8,277	8,277	...	8,277		
	Dulagad ...	1887	5,301	5,301	...	5,301		
	Birgot ...	1890	4,515	4,515	...	4,515		
	Bhargot ...	1890	6,090	6,090	12	6,078		1,234
	Laibar ...	1890	8,683	8,683	127	8,556		
	Kamia ...	1890	5,796	5,796	...	5,796		
	Sadlimat ...	1890	3,326	4,305	...	4,305		
	Kalonia East ...	1892	...	3,371	...	3,371		
	Sarda Range.							
	Salani ...	1876	403	403	...	403		
	Guliapani ...	1891	978	1,000	1,000	...		
	Ditto ...	1892	...	523	523	...		
	Kakrali ...	1891	771	672	...	672		

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH. [Form No. 51.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON, 1892,—TO ACCOMPANY REPORT FOR 1891-92—(*continued*).

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 30th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	Sarda Range—(concluded).						Rs.	
KUMAUN DIVISION—(*concluded*)	Dangsona	1890	825	825	...	825	873	
	Naghan	1890	686	686	...	686		
	Bansa	1890	803	803	...	803		
	Khapkot	1890	433	433	...	433		
	Khamari	1890	610	610	...	610		
	Chini	1892	...	7,029	3,943	3,086		
	Bastia	1892	...	1,303	...	1,303		
	Jariakhal North	1890	...	1,215	...	1,215		Last year under II.—Areas protected by the ordinary establishment.
	Ditto South	1890	...	1,100	...	1,100		Ditto ditto ...
	Total ...	...	125,768	141,483	6,369	135,114	6,549	
GARHWÁL DIVISION ...	North Patli Dún (part of Patli Dún forest block No. II).	1878	45,692	45,692	2,701	42,991	2,026	
	South Patli Dún (part of Patli Dún forest block No. II).	1873	24,588	24,588	...	24,588	2,178	
	Garhibulchand (part of forest block No. VII) ...	1877	8,996	8,996	...	8,996	742	
	Behar (part of Behar forest block No. VIII) ...	1881	11,531	11,531	...	11,531	1,065	
	Chilkia (part of Chilkia forest block No. IV) ...	1872	50,620	50,620	55	50,565	1,824	
	Kotah (part of Kotah forest block No. V) ...	1877	35,908	36,178	...	36,178	1,143	
	Kailkhur (part of Dabka forest block No. VI) ...	1888	4,044	4,104	...	4,104	79	
	Total ...	...	181,379	181,709	2,756	178,953	9,117	

	Gos Range.						
Ganges Division	Kunaun	1887	8,131	8,131	...	8,131	842
	Kaura Chaur .	1881	2,169	2,169	...	2,169	
	Audher Majhera		1,410	1,410	...	1,410	
	Dogalda		5,004	5 004	.	5,004	
	Jagi Chaur		6,923	6,923		6,923	
	Mandhal . .		3,629	3,629	...	3,629	
	Udeypur Range.						
	Rawasan and Luni	1890	3,254	3,254	..	3,254	589
	Ditto	1892		7,331	...	7,331	
	Gwalgarh and Malan	1887	5,064	5,064	...	5,064	
	Sukrao	1882	1,112	1,112	..	1,112	
	Kohtri Range						
	Dabina	1886	11,082	11,082	...	11,082	1,163
	South Kohtri	1889	3,596	3,596	...	3,596	
	North Kohtri	1890	8,100	8,100	...	8 100	
	Nauri	1891	1,369	1,369		1,369	
	Cheula	1891	504	504		504	
	Sona nadi Range.						
	Sh sham Khata	1877	1,847	1,847	...	1,847	728
	North Sona nadi	1889	12,920	12,920		12,920	
	Palain Range						
	Mandalta	1888	8,715	8,715	...	8,715	1,102
	Kansur		8,829	8,829	...	8,829	
	Tumaria		4,071	4,071	...	4,071	
	Kugad	1891	3,571	3,571	...	3,571	
	Total ...	...	101,300	108,631	...	108,631	4,424

[Form No. 51.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON, 1892,—TO ACCOMPANY REPORT FOR 1891-92—*(concluded)*.

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 30th June 1891.	During dry season of 1892.			Cost during the season	Remarks.
				Area attempted to be protected	Failures.	Actually protected		
	Jhánsi Range and Pargana						Rs.	
BUNDELKHAND DIVISION ...	Dhukwan and Sukwan blocks	1874	2,239	2,239		2,239	171	
	Bajna block	1888	529	539	...	539	54	
	Lalitpur Range							
	Kachnoda forests	1888	190	190	...	190	27	
	Sarwas	1888	100	100	...	100	34	
	Jagarh	1875	998	998	...	1,000	69	
	Ditto	1892	...	2	...			
	Garauli	1875	751	751	...	751	...	
	Talbehat Pargana forests	1888	...	11,652	...	11,697	228	
	Ditto	1892	...	45				
	Bánda Range.							
	Ránipur	1892	...	16,220	...	16,220	324	
	Chauri Donda	1892	...	14,967	2,078	12,889	155	
	Kalua	1892		6,182	...	6,182	75	
	Total ...	...	4,807	53,885	2,078	51,807	1,137	
	Total I. ...	...	4,97,070	5,76,139	17,263	5,58,876	23,608	
	II.—Areas protected by the ordinary establishment.							
NAINI TAL DIVISION. Ránikhet Sub-Division.	Machor protected forest	1888	146	146	...	146	...	See I.—Areas under special protection
	Siahi Devi	1888	2,064	...	...	...	...	
	Total ...	...	2,210	146	...	146	...	

Kumaun Division	Jarikhal North	...	1890	1,035	...	...	...	...	See I —Areas under special protection.
	Ditto South	...	1890	1,100	...	...	...	...	
	Total	...	...	2,135	...	...	...	...	
	Jhánsi Range								
	Remaining forest blocks in Jhánsi pargana	...	1888	11,287	12,434	155	12,279	...	
	Mau pargana forests	...	1888	6,925	6,925	60	6,865		
	Garotha ditto	...	1888	6,513	6,513	40	6,473	...	
	Moth ditto	...	1888	1,952	1,952	...	1,952	...	
	Lalitpur Range.								
	Talbehat forests	...	...	...	...	...	...	...	For Talbehat Forests see I —Areas under special protection.
Bundelkhand Division	Bansi do.	...	...		4,667	20	4,647	...	
	Banpur do.	...	1888	15,905	4,745	...	4,745	...	
	Balbehat do.	...	...		2,800	1,423	26,999	...	
	Ditto do.	...	1892	...	25,622				
	Mehroni do.	...	1892	...	1,283	...	1,283	...	
	Maraura do.	...	1892	...	39,415	680	38,735	...	
	Bánda Range.								
	Matdar	...	1892	...	6,729	1,600	5,129	...	
	Manikpur	...	1892	...	10,899	...	10,899	...	
	Total	...		42,582	123,984	3,978	120,006	...	
	Total II.	...	...	46,027	124,130	3,978	120,152	...	
	Grand Total	...	...	544,897	700,209	21,241	679,028	23,608	
	Total for 1891	...	...	482,779	559,068	14,171	544,897	21,376	

[Form No. 52.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

AREA OF PLANTATIONS, 1891-92.

Division.	Name of plantation.	Area in acres. On 1st April 1891.	Added during the year.	Excluded during the year.	Area on 31st March 1892.	Receipts (Of the year.)	Charges (Of the year.)	Remarks.
	Regular Plantations.					Rs.	Rs.	
Ránikhet Sub-Division ...	Ránikhet Nursery	50	...	...	50	1,095	1,328	
	Total Regular Plantations ...	50	...	...	50	1,095	1,328	
	Cultural operations.							
Naini Tal Sub-Division ...	Jabar	147	...	...	147	...	18	Of this area about 50 acres are stocked with coppice and natural seedlings : cost of the year on account of weeding.
	China	96	...	...	96	...	13	Renewing 830 failures.
	Kala	39	...	...	39	...	...	
	Nairwarf	43	...	...	43	...	...	
	Deopata	47	...	...	47	...	...	
	Kiladhunga	25	...	...	25	...	...	
	Bhadli	33	...	...	33	...	...	
	Maulani	49	...	...	49	...	46	Nursery works.
	Chatrani	5	...	...	5	...	...	
	Various	...	...	...	...	...	...	Area not known ; either imperfectly stocked or incomplete.
	Total ...	484	...	...	484	...	77	
Ránikhet Sub-Division ...	Dalmoti	...	1	...	1	...	25	Actual area ½ acre.
	Jakhdeo (Upper)	367	...	...	367	...	15	Area approximate ; renewing 1,140 failures.
	Ditto (Lower)							
	Garkhet							
	Jainoli							
	Disarmikhet							
	Ghingarukhal							
	Dwarson	...	6	...	6	...	33	
	Payiakhet (Dwarson)	...	1	...	1	...	26	Actual area ¼ acre.
	Various	...	...	...	...	...	...	Area not known ; imperfectly stocked or incomplete.
	Total ...	367	8	...	375	...	99	
	Total, Naini Tal Division ...	851	8	...	859	...	176	

NAINI TAL.

KUMAUN	Haldwáni and Chorgalia	7	...	...	7	...	268	Contains fruit trees of various kinds. Up-keep.
GARHWÁL	Chopra	40	5	5	40	...	4	
	Ramnagar, Mohan and Leta .	...	.		..		137	Petty works.
	Total .	40	5	5	40	..	141	
GANGES	Chila	1	...	...	1	...	...	One and a half acres of 1890-91 altered to 1 acre in accordance with section 239 of Forest Department Code
	Haldukhata	1	...	...	1	...	135	Mango groves in camping grounds Up-keep, includes Rs. 39 for wire fencing
	Saneh	3	.	...	3	...	2	
	Total ..	5	.	.	5	...	137	
BUNDELKHAND	Jhansi	.	3	3	...	...	48	
	Sukwan Dhukwan	46	2	48	...	.	39	
	Ganupura	39	2	41	...	...	29	
	Kachnoda	25	...	25	...	...		
	Hadda	2	..	2	...	...	...	
	Mamauiya	.	.	...	...	...	..	
	kaluha	5	...	5	.	...	...	
	Total ...	117	7	124	...	...	116	
	Total of Cultural Operations	1,020	20	129	911	...	838	
	GRAND TOTAL OF PLANTATIONS AND CULTURAL OPERATIONS.	1,070	20	129	961	1,095	2,166	

Abstract of changes in area of Plantations.

		Acres.
Total Plantations of all classes		1,070
Add —		
Work actually done during the year	20	
Deduct —		
Failures struck off	129	
Net deduction		109
Total of all classes on 31st March 1892		961

FOREST DEPARTMENT, CENTRAL CIRCLE, N W PROVINCES AND OUDH

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1891-92, AND AGENCY OF EXPLOITATION.

Division.	Description of felling	Timber in the rough, logs				Timber in the rough, poles.					Sawn or squared timber					Miscellaneous.					Fuel.					Total.
		Government.	Purchasers	Free grantees	Right holders	Total	Government.	Purchasers	Free grantees	Right holders.	Total	Government.	Purchasers	Free grantees	Right holders	Total	Government.	Purchasers.	Free grantees	Right holders	Total	Government	Purchasers.	Free grantees	Right-holders.	Total	Outturn
	I—RESERVED FORESTS.																									
Naini Tal	*Regeneration—*																									
	(a) Selection fellings		55,980	2,600	5,144	63,724		.	...		...		...	...	.			...	...		.	23,181	101,544	...	...	124,725	188,449
	Amelioration—																									
	(d) Thinnings			..	.	...		24	120	5,036	5,180		..			..	...	...	...		...	1,892	374	...	...	2,266	7,446
	Unclassed fellings.																									
	Green . ..	...		.	...	..	..	..	...		...		..	...		..	..	...	...	..	...	13,364	20,304	..		33 668	33,668
	Dry . ,			...	..	.	...	...	...	...			..	...	..	...		...		...		35,500	3,596	.	5,750	44,996	44,996
	Total		55,980	2,600	5,144	63,724		24	120	5,036	5,180		..	..			..	...		..		73,987	125,918		5,750	205,655	274,559
Kumaun	*Regeneration—*																									
	(a) Selection fellings		16,444	335	13,460	30,239		12	161		173	.	33,435	5,963		39,398	.	.	..	...	..	...		.		69,810
	(b) Coppice with standards.		57	..		57		4		...	4	.	.	..	.		..	...	...		...	...	700	...	...	700	761
	Amelioration—																									
	(c) Improvement fellings.		2,309		...	2,309	...	15,071	.		15,071		28,810	...		28,810	.	.	.	.		...	98,760	.	...	98,760	144,950
	(d) Thinnings .	.	34	66	.	100		3,199	.		3,199		...	55		55	...	...	...	...	.	..	...	...	...	.	3,354
	Unclassed fellings																									
	Green ..	.	2,895	...	2,803	5,698		4,479		247	4,726	..	1,848	1,221		3 069	...					.	22,539	460	.	22,999	36,492
	Dry ...	.	1,094	..		1,094	..	148	..	13,605	13,753		32,159	978		33,137		.		.		...	47,620	4,510	835,666	887,796	935,780
	Total .	.	22,833	401	16,263	39,497		22,913	161	13,852	36,926		96,252	8,217		1,04,469		...	.	..			169,619	4,970	835,666	1,010,255	1,191,147

Garhwal.	*Regeneration—*																									
	(a) Selection fellings	...	5,275	...	...	5,275	...	327	...	...	327	.	146,804	7,364	..	148,168	...	1,074	...	...	1,074	...	.	...	..	.	154,844
	Strip fellings	...	291	...	...	291	...	1,876	...	..	1,876		...	...	...	...	...	...	...	...	...		.	60,051	..	..	60,051	62,218
	Amelioration—																									
	(c) Improvement fellings.		62	...	..	62	...	5	...	...	5	..	22,540	...	...	22,540	...	...	...	...	...	...	...	...	...	..	22,607
	Unclassed fellings.																									
	Green ...	...	116	...	...	116	...	2,715	...	...	2,715	.	1,211	...	...	1,211	...	8,916	5,178	7,821	21,915	...	...	...	...	.	25,057
	Dry ...	..	7,379	...	...	7,379	...	19,949	...	...	19,949	...	5,912	50	..	5,962	...	50,601	..	192	50,792	...	93,218	..	..	378,855	472,073	556,156
	Total	...	13,123	..	...	13,123	...	24,872	...	...	24,872	.	170,467	7,414	..	177,881	...	60,591	5,178	8,013	73,782	..	153,269	..	..	378,855	532,124	821,782
Ganges.	*Regeneration—*																									
	(a) Selection fellings	...	2,116	7,846	5,231	15,193	...	117	...	.	117	.	45,325	...	...	45,325	...	1,266	...	...	1,266	...	...	...	...	...	61,901
	Unclassed fellings.																									
	Green ...	...	...	...	...	...	..	..	...	...	...	.	..	...	...	...	...	81	...	...	81	...	...	...	...	.	81
	Dry ...	...	146	.	...	146	...	640	...	...	640	.	57,554	.	...	57,554	...	...	.	...	...	...	275,872	...	128,055	403,927	462,267
	Total	..	2,262	7,846	5,231	15,339	...	757	...		757	..	102,879	...	.	102,879	...	1,347		..	1,347	..	275,872	...	128,055	403,927	524,249
Bundelkhand.	*Regeneration—*																									
	(a) Selection fellings	16	68	..	...	84	1,949	5,220	150	132	7,451	..	...	...	.	...	12,438	63,413	...	70	75,921	6,570	18,798	400	...	25,768	109,224
	Total	... 16	68	.	...	84	1,940	5,220	150	132	7,451		..	..	..	...	12,438	63,413	.	70	75,921	6,570	18,798	400	.	25,768	109,224
	Total, Reserved Forests	16	94,266	10,847	26,638	131,767	1,949	56,786	431	19,020	75,186	...	369,596	15,631		385,229	12,438	125,351	5,178	8,083	151,050	80,567	743,476	5,970	1,348,326	2,177,729	2,920,961
	II —PROTECTED FORESTS.																									
Naini Tal.	*Regeneration—*																									
	(a) Selection fellings	...	61,548	280	53,892	115,720	...	...	...	...	...	..	...	...	.	...	...	...	..	...	...	37,029	143,250	...	...	180,279	295,999
	Amelioration—																									
	(d) Thinnings	...	...	...	..	...	...	1,488	11,988	50,232	63,708	..	...	..	.	...	...	...	...	...	...	1,808	288	...	...	2,096	65,804
	Unclassed fellings																									
	Green	...	..	...	...	...	...	...	...	...	...		...	...	.	...	...	...	...	...	...	6,686	...	...	...	6,686	6,686
	Dry	...	...	...	...	...	...	...	...	...	...	...	...		.	...	...	...	...	..	...	40,240	150,520	...	11,500	202,260	202,260
	Total		61,548	280	53,892	115,720	...	1,488	11,988	50,232	63,708		...	..		...	...	...	...	...	...	85,763	294,058	...	11,500	391,321	570,749

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH. [Form No. 54.

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1891-92, AND AGENCY OF EXPLOITATION—*(concluded)*.

Division.	Description of felling.	Timber in the rough; logs.					Timber in the rough; poles.					Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
		Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
Bundelkhand.	*Regeneration—*																										
	(a) Selection fellings ...	...	52	...	...	52	...	1,880	...	...	1,880	..	...	...	.	...	...	1,938	252	...	2,190	80	3,520	400	...	4,000	8,122
	Total ...		52	...	...	52	...	1,880	...	...	1,880	.	...	...	...	...	...	1,938	252	...	2,190	80	3,520	400	...	4,000	8,122
	Total, Protected Forests,		61,600	280	53,892	1,15,772	...	3,368	11,988	50,232	65,588	...	...	...	...	...	...	1,938	252	...	2,190	85,843	297,578	400	11,500	395,321	578,871
												III.—Unclassed Forests.															
Gangas.	*Unclassed fellings.*																										
	Dry	..	...	...	...	...	...	...	...	...	...	...	42,678	...	...	42,678	...	...	...	...	...	...	48,852	...	...	48,852	91,530
	Total ...		...	...	...	...	...	...	...	...	...	.	42,678	...	...	42,678	...	...	...	...	...	...	48,852	...	...	48,852	91,530
Bundelkhand.	*Regeneration—*																										
	(a) Selection fellings ...		4	...	...	4	...	352	...	...	352	...	...	...	...	...	7	1,725	...	...	1,732	...	2,500	...	...	2,500	4,588
	Total ...	.	4	...	...	4	...	352	...	...	352	.	...	...	.	...	7	1,725	...	...	1,732	...	2,500	...	...	2,500	4,588
	Total, Unclassed Forests	.	4	...	...	4	...	352	...	...	352	..	42,678	...	...	42,678	7	1,725	...	...	1,732	...	51,352	...	...	51,352	96,118

ABSTRACT. I.—Reserved Forests.

Regeneration—																								
(a) Selection fellings	16	79,883	10,781	23,835	114,515	1,949	5,676	311	132	8,068	...	219,564	13,327	..	232,891	12,438	65,753	...	70	78,261	29,751	120,342	400	...	150,493	384,228
(b) Coppice with standard	...	57	.	...	57	...	4	...	...	4	..	...	...	..	...	...	...	...	...	...	...	700	...	..	700	761
Strip fellings ...	...	291	...	...	291	..	1,876	...	...	1,876		...	...	..	...	...	...	...	...	...	...	60,051	...	...	60,051	62,218
Amelioration.																										
(c) Improvement fellings.	...	2,371	..	...	2,371	...	15,076	...	...	15,076	.	51,350	...	...	51,350	...	...	...	...	...	...	98,760	...	...	98,760	167,557
(d) Thinnings ..		34	66	...	100	...	3,223	120	5,036	8,379	..	...	55	.	55	...	...	...	...	...	1,892	374	...	...	2,266	10,800
Unclassed fellings.																										
Green		3,011	...	2,803	5,814	..	7,194	...	247	7,441	...	3,059	1,221	..	4,280	...	8,997	5,178	7,821	21,996	13,364	42,843	460	...	56,667	96,198
Dry	.	8,619	...	..	8,619	...	20,737	...	13,605	34,342	..	95,625	1,028	.	96,653	...	50,001	...	192	50,793	35,550	420,406	4,510	1,348,326	1,808,792	1,999,199
I.—Reserved Forests	16	94,266	10,847	26,638	131,767	1,949	53,786	431	19,020	75,186		369,598	15,631	.	385,229	12,438	125,351	5,178	8,063	151,050	80,557	743,476	5,370	1,348,326	2,177,729	2,920,961
Regeneration—																										
(a) Selection fellings ..	...	61,600	280	53,892	115,772	...	1,880	..	...	1,880		...	...	...	...	...	1,938	252	...	2,190	87,109	146,770	400	...	184,279	304,121
Amelioration—																										
(b) Thinnings . .		...	...	...	...	...	1,488	11,988	50,232	63,708	...	...	...		...	...	...	...	...	...	1,808	288	...	...	2,096	65,804
Unclassed fellings.																										
Green	.	...	...	..	...	...	...	...	...	...		...	...	..	...	...	...	...	...	...	6,686	...	...	...	6,686	6,686
Dry	.	...	...	..	...	...	...	...	...	...		...	...	.	...	...	...	...	...	...	40,240	150,520	...	11,500	202,260	202,360
II.—Protected Forests	..	61,600	280	53,892	115,772	...	3,368	11,988	50,232	65,588	.	...	.	...	...	.	1,938	252	...	2,190	85,843	297,578	400	11,500	395,321	578,871
Regeneration—																										
(a) Selection fellings ..	...	4	...	...	4	...	352	...	...	352	..	...	...	...	..	7	1,725	...	...	1,732	...	2,500	...	...	2,500	4,588
Unclassed fellings.																										
Dry .. .	...	...	...	...	...	...	...	..	...	...		42,678	...	..	42,678	...	.	...	...	..	...	48,852	...	. ..	48,852	91,530
III.—Unclassed Forests		4		...	4	...	352	...	..	352	.	42,678	...	...	42,678	7	1,725	...	...	1,732	...	51,352	...		51,352	96,118
Grand Total ...	16	155,870	11,127	80,530	247,543	1,949	57,506	12,419	69,252	141,126	...	412,276	15,631	..	427,907	12,445	129,014	5,430	8,063	154,972	166,400	1,092,406	5,770	1,359,826	2,624,402	3,595,950

[Form No. 55.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1891-92.

Division.	Description of produce.	Produce removed or utilized										Remarks.
		By Government Agency		By purchasers.		By free grantees		By right holders.		Total		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity.	Value.	Quantity.	Value	
			Rs		Rs		Rs		Rs		Rs.	
				I.—Reserved Forests.								
Naini Tal ...	Bamboos ... . Nos. ..	.	...	3,250	45	...	.	.		3,250	45	
	Grazing .. .		...	..	1,751	...	...	.			1,751	
	Other minor produce . * ...	..	...		1,547	...	...	..			1,547	
	Total Naini Tal ...	...	...	..	3,343	.	...		..	.	3,343	
Kumaun ...	Bamboos .. .. Nos. ...	..	...	12,72,580	4,781	3,280	15	54,720	184	13,30,580	4,980	
	Grazing .. .	..			7,818			.			7,818	
	Other minor produce ...	...	105		25,127		612		752		26,596	
	Total Kumaun	...	105		37,726	...	627	.	936		39,394	
Garhwál	Bamboos ... .. Nos.	..	..	31,08,280	17,618	2,160	16	36,800	292	31,47,240	17,926	
	Grazing ..	...	..		4,582		.		..		4,582	
	Other minor produce	...	.	.	7,847		.	...			7,847	
	Total Garhwál ...	...	...		30,047	..	16	...	292	.	30,355	
Ganges ..	Bamboos ... . Nos. .	..		90,32,224	72,125		..	5,740	29	90,37,964	72,154	
	Grazing	..	...		7,240		.				7,240	
	Other minor produce		...		5,401		.	...			5,401	
	Total Ganges ...	.			84,766	.	..	...	29		84,795	

Bundelkhand ...	Bamboos	Nos.	4,28,710	5,210	1,08,380	561	...	...	100	1	5,37,190	5,772
	Grazing	...	...		.	10,405	.	...		...	..	10,405
	Other minor produce	...	...	592	.	3,111	.	...	..	1	...	3,704
	Total Bundelkhand	...		5,802	...	14,077		...	...	2	...	19,861
	Total Reserved Forests	...	..	5,907	...	1,69,959		643	..	1,259		1,77,768
	II —Protected Forests.											
Naini Tal	Bangals	Nos.		.	28,230	59		.	.		28,230	59
	Grazing			...		745		...	...	...	...	745
	Other minor produce ...	..	..			2,763		...		.	...	2,763
	Total Naini Tal	..	...	...	...	3,567	.	...	...	...		3,567
Bundelkhand	Bamboos . ..	Nos.	55,310	685	49,040	212	.	.	.	...	104,350	897
	Grazing	...	...		...	529	...			.		529
	Other minor produce ...		...	...	..	432	.	.		..	..	432
	Total Bundelkhand	...		685	.	1,173	..	.	..	...	.	1,858
	Total Protected Forests	...		685	..	4,740				...	..	5,425
	III —Unclassed Forests											
Ganges .	Bamboos ...	Nos.	.	...	9,14,269	4,389		...	..	.	9,14,269	4,389
	Grazing	...	...	...		610	...	...	...	...	...	610
	Other minor produce	...	...	.	...	824		.	...	.	...	824
	Total Ganges		...	.	...	5,823	...	...	...	...		5,823
Bundelkhand ..	Bamboos ...	Nos	1,33,870	1,629	25,960	451	.		..	...	1,59,830	2,080
	Grazing		...			1,711	..	.		...	...	1,711
	Other minor produce ...			...	...	825	..	...	...	.	...	825
	Total Bundelkhand			1,629		2,987	...	...	.	..	...	4,616
	Total Unclassed Forests		...	1,629		8,810			...	—	...	10,439

[Form No. 55.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTTURN OF MINOR PRODUCE DURING THE YEAR 1891-92—(*concluded*).

ABSTRACT (CLASS OF FORESTS).

Division.	Description of Produce.	Produce removed or utilised.										Remarks.
		By Government Agency		By purchasers.		By free grantees.		By right holders		Total.		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
					I.—Reserved Forests.							
	Bamboos ... ... Nos.	428,710	5,210	1,35,24,714	95,130	5,440	31	97,360	506	1,40,56,224	1,00,877	
	Grazing	...		...	31,796			..	...		31,796	
	Other minor produce	.	697	...	43,033	...	612	..	753	...	45,095	
	Total Reserved Forests ...	.	5,907	.	1,69,959	...	643	...	1,259	.	1,77,768	
					II.—Protected Forests.							
	Bamboos and ringals .. Nos ...	55,310	685	77,270	271	...		...	...	1,32,580	956	
	Grazing	...	..		1,274		...		...	...	1,274	
	Other minor produce	...	...	...	3,195	...		...	...		3,195	
	Total Protected Forests ...		685	.	4,740	...	...	...	...	.	5,425	
					III.—Unclassed Forests.							
	Bamboos ... . Nos. ..	1,33,870	1,629	9,40,229	4,840	...	...	...		10,74,099	6,469	
	Grazing	...	...	...	2,321	...	..	...	...	...	2,321	
	Other minor produce ...	...	.	..	1,649	...	..	...	.		1,649	
	Total Unclassed Forests		1,629	...	8,810	...	.	...	...		10,439	
	Grand Total ...	...	8,221	...	1,83,509	...	643	...	1,259	..	1,93,632	

					Abstract (Class of Produce).						
Bamboos ... ... Nos ...	617,890	7,524	1,45,42,213	1,00,241	5,440	31	97,360	506	1,52,62,908	1,08,302	
Grazing	...	...	...	35,391	...	...	...	...	...	35,391	
Other minor produce	...	697	...	47,877	...	612	...	753	...	49,939	
Grand Total ...	...	8,221	...	1,83,509	...	643	...	1,259	...	1,93,632	

	Rs.	Rs.	Rs.
Add—			
Bundelkhand Division: outstandings of former years	113	113	1,93,632
Deduct—			
Ditto value of bamboos unsold	2,273		
Total under Free grants and Right-holders ...	1,902		
		4,175	
Net deduction			4,062
Total Receipts under I. (*a*), I. (*c*), II. (*c*), (*d*), (*e*), ...			1,89,570

[Form No. 56.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Balance in hand at commencement of the year.				
BUNDELKHAND DIVISION.				
Miscellaneous ballis	892	1,722		
Axle-trees	40	80		
Yokes	13	6		
Thin ballis for roofing	1	1	946	1,809
Firewood ... ... Mds. ...	1,179	2,358		
Charcoal ... ... " ...	107	1,070	1,286	3,428
Bamboos ... ... Nos. ...	251,982	..	251,982	...
Kiras ... ... " ...	1,809	...		
Kurias .. ... " ...	37,840	...	39,649	...
Received from the forests in depôts.				
Miscellaneous ballis	4,522	5,188	4,522	5,188
Firewood ... ... Mds. ...	82,339	164,674		
Charcoal ... ... " ...	55	550	82,394	165,228
Bamboos ... ... Nos. ...	448,710	...	448,710	...
Kiras ... ... " ...	1,010	...		
Kurias ... ... " ...	22,607	...		
Grass ... ...Bundles ...	279,000	...	302,617	...

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Removed by purchasers from depôts.				
Miscellaneous ballis	2,234	3,350	2,234	3,350
Firewood ... ... Mds. ...	84,133	168,267		
Charcoal ... ... " ...	53	530	84,186	168,797
Bamboos ... ... Nos. ...	323,993	...	323,993	...
Kiras ... . " ...	2,754	...		
Kurias ... . " ...	54,268	...		
Grass ... ...Bundles ...	100,000	...	157,022	...
Received from the forests and sold locally.				
Miscellaneous ballis	2,720	9,222	2,720	9,222
Firewood ... ... Mds. ...	586	1,172	586	1,172
Bamboos ... ... Nos. ...	113,386	...	113,386	...
Kurias ... ... " ...	202	...		
Grass ... ... Bundles...	254,900	...		
Leather pieces ... ... Nos. ...	15	...		
Horns ... ... " ...	4	...	255,121	...
Struck off for various causes.				
Miscellaneous ballis	698	2,073		
Axle-trees	40	80		
Yokes	13	6		
Thin ballis for roofing	1	1	752	2,160
Firewood ... ... Mds ...	153	306	153	306
Bamboos ... ... Nos. ...	24,926	...	24,926	...
Kiras ... ... " ...	65	...		
Kurias ... ... " ...	1,154	...	1,219	...

Received from the forests and sold locally.				
Miscellaneous ballis	2,720	9,222	2,720	9,222
Firewood ... ... Mds. ..	586	1,172	586	1,172
Bamboos ... ... Nos. ...	1,13,386	...	1,13,386	...
Kurias ... ... " ...	202	...		
Grass ... ... Bundles ...	254,900	...		
Leather pieces ... ... Nos. ...	15	...		
Horns ... ... " ...	4	...	2,55,121	...
Omitted in previous returns.				
In receipts from forests } Bamboos, Nos. ...	55,794	...	81,030	...
In stock on hand } Bamboos, Nos. ...	25,236			
Received by purchase.				
Firewood ... ... Mds. ...	1,090	2,181	1,090	2,181
GRAND TOTAL ... Timber	...	...	8,188	16,219
GRAND TOTAL ... Firewood, Mds. ...	85,194	1,70,389		
GRAND TOTAL ... Charcoal, " ...	162	1,620	85,356	172,009
GRAND TOTAL ... Bamboos, Nos. ...	...	...	8,95,108	...
GRAND TOTAL ... Kiras, " ...	2,819	...		
GRAND TOTAL ... Kurias, " ...	60,649	...		
GRAND TOTAL ... Grass, Bundles ...	533,900	...		
GRAND TOTAL ... Leather pieces, Nos. ...	15	...		
GRAND TOTAL ... Horns, " ...	4	...	597,387	...

Used by Department.				
Miscellaneous ballis	15	23	15	23
Bamboos ... ... Nos. ...	310	...	310	...
Balance at close of the year.				
BUNDELKHAND DIVISION.				
Miscellaneous ballis	2,467	1,464	2,467	1,464
Firewood ... ... Mds. ...	322	644		
Charcoal ... ... " ...	109	1,090	431	1,734
Bamboos ... ... Nos. ...	4,32,493	...	4,32,493	...
Kurias ... ... " ...	5,025	...		
Grass ... ... Bundles ...	179,000	...	184,025	...
GRAND TOTAL ... Timber	...	...	8,188	16,219
GRAND TOTAL ... Firewood ... Mds. ...	85,194	1,70,389		
GRAND TOTAL ... Charcoal ... " ...	162	1,620	85,356	172,009
GRAND TOTAL ... Bamboos ... Nos. ...	...	...	8,95,108	...
GRAND TOTAL ... Kiras ... " ..	2,819	...		
GRAND TOTAL ... Kurias ... " ...	60,649	...		
GRAND TOTAL ... Grass ... Bundles ...	533,900	...		
GRAND TOTAL ... Leather pieces ... Nos. ...	15	...		
GRAND TOTAL ... Horns ... " ...	4	...	597,387	..

[Form No. 57A.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1891-92.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favor of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
Timber. *Sale Depôts.*									
Miscellaneous ballis ...	892	1,722	546	1,744	435	903	357	...	
Axle-trees ...	40	80	4	...	...	...	...	4	
Thin ballis for roofing ...	1	1	...	...	...	...	...	...	
Yokes ...	13	6	2	...	...	...	...	2	
Total ...	946	1,809	552	1,744	435	903	351	...	
Forest Depôts.									
Miscellaneous ballis ...	...	...	...	723	1,029	181	181	...	
Total Timber ...	946	1,809	552	2,467	1,464	1,084	532	...	
Firewood, Charcoal and Bamboos, &c. *Sale Depôts.*									
Firewood, maunds ...	1,179	2,358	294	322	644	54	...	240	
Charcoal " ...	107	1,070	100	169	1,090	54	...	46	
Bamboos, Nos. ...	2,51,982	...	3,013	1,92,569	...	2,887	...	126	
Kiras " ...	1,809	...	160	...	...	...	...	160	
Kurias " ...	37,840	...	378	5,025	...	50	...	328	
Total ...	...	3,428	3,945	...	1,734	3,045	...	900	
Forest Depôts.									
Bamboos, Nos. ...	...	...	...	2,39,024	...	2,399	2,399	...	
Grass, bundles ...	...	...	...	179,000	...	89	89	...	
Total ...	...	...	...	...	...	2,488	2,488	...	
Total Firewood, &c. ...	...	3,428	3,945	...	1,734	5,533	1,588	...	
Grand Total ...	...	...	4,497	...	...	6,617	2,120	...	
Total for 1890-91 ...	...	...	1,659	...	...	4,497	2,838	...	

[Form No. 57B.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1891-92.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value		Remarks.
	No.	Value	No.	Value.	In favour of the year.	Against the year.	
		Rs.		Rs	Rs.	Rs.	
Live Stock.							
Elephants ...	10	15,400	10	15,200	.	200	
Bullocks .	36	600	...	...	...	600	
Total Live Stock ...	46	16,000	10	15,200	...	800	
Dead Stock.							
Buildings	176	1,19,615	205	1,28,135	7,910	...	Last year's figures altered by 4.
Sheds ...	14	1,210					
Wells	.	..	17	5,100	5,100	.	Wells were omitted last year.
Tools and Plant	15,091	19,129	17,243	21,981	2,852	...	
Office and rest-house furniture.	775	3,138	1,028	4,759	1,321	.	
Almirahs	8	300					
Carts	24	600	...	...	...	600	
Gunpowder barrels .	2	84	2	84	...	...	
Slow match barrels ...	1	84	1	84	...	...	
Miscellaneous	...	...	149	116	116	...	
Total, Dead Stock ..	16,091	1,44,160	18,645	1,60,259	16,699	600	
GRAND TOTAL ..	...	1,60,160	...	1,75,459	16,699	1,400	
	Net difference in favour of the year			...	15,295	..	

[Form No. 58.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1891-92

Budget Heads.	Direction.	Naini Tal Division.	Kumaun Division.	Garhwál Division.	Ganges Division.	Bundelkhand Division.	Total.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—*Timber and other produce removed from the Forests by Government Agency—*							
a. Timber	...	...	...	...	...	1,248 8 0	1,248 8 0
b. Firewood and charcoal	...	36,314 1 4	...	...	...	828 6 1	37,142 7 5
c. Bamboos	...	...	...	...	...	5,363 8 5	5,363 8 5
d. Sandal-wood	...	...	...	..	..	...	...
e. Grass and other minor produce	...	...	105 5 6	...	...	591 9 6	696 15 0
II.—*Timber and other produce removed from the Forests by consumers or purchasers—*							
a. Timber	...	12,757 8 4	70,420 10 6	1,46,124 14 11	49,459 11 3	1,351 8 6	2,80,114 5 6
b. Firewood and charcoal	...	7 023 6 3	4,801 10 8	2,018 3 7	2,365 0 7	1,208 4 6	17,416 9 7
c. Bamboos	...	103 13 0	4,781 5 5	17,617 12 0	76,513 11 1	1,224 0 6	1,00,240 10 0
d. Grazing and fodder grass	...	2,496 5 7	7,818 0 11	4,581 14 7	7,850 5 9	12,644 9 4	35,391 4 2
e. Other minor produce	...	4,309 14 6	25,127 9 2	7,847 2 3	6,225 0 4	4,367 12 3	47,877 6 6
III.—*Drift and waif wood and confiscated forest produce*	...	...	582 0 0	961 4 0	117 8 0	13 12 6	1,694 8 6
IV.—*Revenue from Forests not managed by Government—*							
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...
V.—*Miscellaneous—*							
a. Fines and forfeitures	...	...	1 0 0	17 6 8	...	90 4 0	108 10 8
b Refunds	1 0 0	45 8 5	1 12 5	91 1 0	4 8 0	90 5 0	234 2 10
c. Other sources	...	600 7 6	1,251 14 4	2,223 11 8	258 0 11	1,350 12 11	5,744 15 4
Total, Receipts ...	1 0 0	63,711 0 11	1,14,891 4 11	1,81,503 6 8	1,42,793 13 11	30,373 5 6	5,33,273 15 11

[Form No. 58.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W PROVINCES AND OUDH.

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1891-92—(continued).

Budget Heads.	Direction.	Naini Tal Division.	Kumaun Division	Garhwal Division.	Ganges Division	Bundelkhand Division.	Total
A —CONSERVANCY AND WORKS	Rs a. p	Rs. a. p	Rs a. p.	Rs a p	Rs a p	Rs a p	Rs a p
I.—*Timber and other produce removed from the Forests by Government Agency—*							
a Timber	..	..	..	.	...	325 6 11	325 6 11
b Firewood and charcoal		17,030 9 2	.	.	...	593 0 2	17,623 9 4
c Bamboos	..			.	...	5,234 3 6	5,234 3 6
d Sandal wood		...		...	...	...	...
e Grass and other minor produce	..		300 9 0			147 10 10	448 3 10
II —*Timber and other produce removed from the Forests by consumers or purchasers.*		1,137 6 11	7,051 8 10	7,168 3 11	9,383 0 2	1,646 10 7	26,386 14 5
III —*Drift and waif wood and confiscated forest produce*	.	...	6 2 0	..	...	...	6 2 0
IV —*Revenue from Forests not managed by Government—*							
a Duty on foreign timber and other forest produce	.	.		...	...	...	...
b Revenue from shared and private forests		..	.				.
V —*Rent of leased Forests and payments to shareholders in Forests managed by Government*	...	...	..	...	...	506 15 10	506 15 10
VI —*Live Stock, Stores, Tools and Plant—*							
a Purchase of cattle		...		1 885 0 0		...	1,885 0 0
b Feed and keep of cattle			1 485 6 5	3 024 8 4	1,175 11 6	176 4 3	5,861 14 6
c Purchase of stores, tools and plant	419 3 0	1,484 13 0	1,093 4 2	1,498 6 4	572 5 6	342 1 6	5,410 1 6
VII —*Communications and Buildings—*							
a Roads and bridges		8,804 2 2	8,517 15 11	13,499 11 4	4,582 12 11	1,868 14 1	37,273 8 5
b Buildings	935 0 10	2,764 0 9	4,062 9 7	4 347 15 7	2,096 10 3	693 2 1	15,819 7 1
c Other works	...	14 12 0	649 5 0	859 0 5	123 9 5	.	1,646 10 10
VIII —*Demarcation, improvement and extension of Forests—*							
a. Demarcation	183 5 6	401 14 8	1,439 4 0	134 10 9	168 9 8	950 15 1	3,278 11 3
b Compensation for land and rights		452 10 4					452 10 4
c Surveys and working plans	140 2 0	301 12 11	576 1 7	195 15 2	375 8 7		1,589 8 3
d Sowing and planting	...	1,504 1 3	268 2 11	141 0 11	137 6 0	115 7 10	2,166 2 11
e. Protection from fire	...	1,593 14 2	5 657 6 11	10,599 8 3	4,816 3 8	820 14 2	23,487 15 2
f Other works		925 5 1	1,533 11 8	1,434 13 5	1,324 1 5	0 2 0	5,218 1 7
IX —*Miscellaneous—*							
a Refunds		8 2 0		...	7 0 0	..	15 2 0
b Law charges							...
c Other charges	10 7 6	121 12 1	396 13 0	377 15 9	160 8 7	284 4 9	1,351 13 8
TOTAL A.—CONSERVANCY AND WORKS	1,688 2 10	36,545 4 1	33,058 5 0	45,166 14 2	25,823 7 8	13,706 1 7	1,55,988 3 4

Form No. 58.

FOREST DEPARTMENT, CENTRAL CIRCLE, N W PROVINCES AND OUDH

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1891-92—(concluded).

Budget Heads	Direction	Naini Tal Division.	Kumaun Division.	Garhwal Division	Ganges Division	Bundelkhand Division	Total.
	Rs a p	Rs a p	Rs. a. p	Rs a. p	Rs. a p	Rs. a p	Rs. a p
Brought forward, Total A —Conservancy and Works	1,688 2 10	36,545 4 1	33,058 5 0	45,166 14 2	25,823 7 8	13,706 1 7	1,55,988 3 4
B —ESTABLISHMENT							
I.—*Salaries*—							
a. Conservators	13,032 15 3	...		...	..		13,032 15 3
b Superior officers	...	8,703 5 4	7 195 9 11	12,739 13 5	9,780 0 8	2,902 10 10	41,328 8 2
c Subordinate forest and depôt establishments		3,707 13 4	7,001 1 1	7,657 4 1	7,666 3 5	4,124 7 8	30,156 13 7
d Office establishments	4,307 5 11	1,060 0 0	1,925 0 0	2,039 0 0	1,809 11 4	1,093 8 0	12,254 9 3
e Deputation and special allowances		900 0 0	...		50 0 0		950 0 0
II —*Travelling Allowances*—							
a Conservators	1,507 4 6	...	..				1,507 4 6
b Superior officers	..	1,128 10 8	1,452 5 8	1,889 8 0	1 707 2 0	1.076 8 0	7,254 2 4
c Subordinate forest and depôt establishments		349 4 9	998 0 6	1,131 8 10	1,234 15 5	643 13 7	4,357 11 1
d Office establishments	287 8 0	106 2 0	562 10 8	549 5 4	646 0 8	147 12 2	2,299 6 10
III —*Contingencies*—							
a Stationery	3 9 3	60 14 0	199 13 8	150 0 10	128 8 8	100 13 7	653 12 0
b Carriage of tents and records	712 14 11	472 0 0	481 6 8	476 4 4	738 2 11	292 0 2	3,172 13 0
c Rents, rates and taxes	117 12 10	24 0 0	11 0 0	11 8 0	10 0 0	232 0 0	406 4 10
d. Pay of police guards	297 0 7				0 12 0		297 12 7
e Official postage	363 5 0	92 15 6	99 4 0	99 15 6	107 12 6	202 12 0	966 0 6
f. Sundries	529 6 7	120 12 5	316 7 5	332 13 9	309 2 6	130 15 7	1,739 10 3
Total B —Establishments	21,159 2 10	16,745 14 0	20,242 11 7	27,077 2 1	24,198 8 1	10,954 5 7	1,20,377 12 2
GRAND TOTAL OF EXPENDITURE	22,847 5 8	53,291 2 1	53,301 0 7	72,244 0 3	50,021 15 9	24,660 7 2	2,76,365 15 6

CALCUTTA
The 9th June 1892

J BRIDGNELL,
Chief Supdt, Forest Account Branch

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH. [Form No. 59.

ACCOUNT CURRENT FOR THE YEAR 1891-92.

Dr.

	Rs. a. p.	Rs. a. p.
To Cash Balance	...	19,904 13 3
„ VIII.—Assessed Taxes—		
Income Tax—Deductions from salaries	...	1,669 12 2
Revenue as per Annual Summary, Form No. 58	...	5,33,273 15 11
„ Service Funds—		
Civil Fund—Ordinary, Bengal	. .	...
„ Additional, Bengal	. .	...
Military Fund—Bengal	...	243 0 0
„ „ Madras	...	...
„ Orphan Fund—Bengal	...	210 0 0
Uncovenanted Service Family Pension Fund—Bengal .	...	121 7 0
General Family Pension Fund	...	...
Hindu Family Annuity Fund	...	...
„ Deposits	...	1,975 0 0
„ Forest Cash Remittances—Local—		
Forest cheques drawn	2,61,245 0 11	...
Inter-Divisional transfers	333 5 4	2,61,578 6 3
„ Advances recoverable	...	45,959 15 3
„ Suspense .. „	...	9 8 0
„ Account Current (other Governments)—		
Remittances from Government of India	...	6,142 0 0
„ Inter-Departmental Transfers—		
Public Works Department	...	...
Military Department Bengal	...	2,391 3 2
Civil Department—		
Jail	..	...
Survey of India Department	408 3 0	...
Miscellaneous	218 2 7	626 5 7
Total .	...	8,74,105 6 7

Cr.

	Rs. a. p	Rs a. p
By Expenditure as per Annual Summary, Form No. 58	...	2,76,365 15 6
„ Deposits	...	50 0 0
„ Forest Cash Remittances—Local—		
Remittances to Treasuries	4,94,941 14 2	...
Inter-Divisional Transfers	231 0 0	4,95,172 14 2
„ Advances Recoverable	...	45,785 6 7
„ Suspense	...	9 8 0
„ Account Current (other Governments)—		
Remittances to the Government of India	...	625 14 0
„ Inter-Departmental Transfers—		
Public Works Department—Ordinary	...	1,184 4 8
Military Department—Bengal	...	40,415 4 6
Civil Department—Miscellaneous	...	240 5 11
„ Cash Balance	...	14,255 13 8
Total .	...	8,74,105 6 7

CALCUTTA:
The 9th June 1892.

J. BRIDGNELL,
Chief Supdt., Forest Account Branch.

[Form No. 60.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1891-92.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year
		Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction ...	...	...	1 0 0	1 0 0	1 0 0	...
Naini Tal ...	...	884 0 6	63,329 3 5	64,213 3 11	63,711 0 11	502 3 0
Kumaun ...	...	...	1,14,891 4 11	1,14,891 4 11	1,14,891 4 11	...
Garhwál ...	...	...	1,81,503 6 8	1,81,503 6 8	1,81,503 6 8	...
Ganges... ...	...	...	1,42,793 13 11	1,42,793 13 11	1,42,793 13 11	...
Bundelkhand ...	...	1,619 11 3	29,371 14 0	30,991 9 3	30,373 5 6	618 3 9
	Total ...	2,503 11 9	5,31,890 10 11	5,34,394 6 8	5,33,273 15 11	1,120 6 9

[Form No. 61.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1891-92.

Division.	Department Debtor.			Department Creditor.			Balance Due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p.	
Direction ...	...	2,483 1 4	2,483 1 4	327 2 8	2,522 4 9	2,849 7 5	366 6 1	
Naini Tal ...	...	9,852 14 11	9,852 14 11	2,140 0 0	7,974 11 1	10,114 11 1	261 12 2	
Kumaun ...	...	9,429 9 1	9,429 9 1	611 14 0	9,995 10 0	10,607 8 0	1,177 14 11	
Garhwál ...	...	8,822 15 8	8,822 15 8	675 14 11	10,336 7 0	11,012 5 11	2,189 6 3	
Ganges ...	...	5,120 1 2	5,120 1 2	200 6 3	5,752 11 6	5,962 1 9	842 0 7	
Bundelkhand,	...	10,251 5 1	10,251 5 1	1,450 15 5	9,203 10 3	10,654 9 8	403 4 7	
Total ...	...	45,959 15 3	45,959 15 6	5,415 5 3	45,785 6 7	51,200 11 10	5,240 12 7	

J. BRIDGNELL.

Chief Supdt., Forest Account Branch.

[Form No. 62.

FOREST DEPARTMENT, CENTRAL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH.

FINANCIAL RESULTS OF THE YEAR 1891-92.

Division.	Timber and other produce removed from the forests by Government Agency.		Other revenue.		Formation, protection and improvement of forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Direction charges amounting to Rs. 22,847, distributed amongst Divisions as follows:—
Direction ...	.	...	1	...	...	1	...	
Naini Tal ...	36,214	27,926	27,397	11,290	16,075	63,711	55,291	
Kumaun ..	105	301	1,14,786	27,791	30,210	1,14,891	58,302	
Garhwál ...	...	...	1,81,504	37,704	42,040	1,81,504	80,744	
Ganges ...	...	..	1,42,794	29,542	26,980	1,42,794	56,522	
Bundelkhand ...	8,032	7,509	22,341	8,740	9,249	30,373	25,507	
GRAND TOTAL ...	44,451	35,736	4,88,823	1,15,076	1,25,554	5,33,274	2,76,366	

	Rs.
Naini Tal	2,000
Kumaun	5,000
Garhwal	8,500
Ganges	6,500
Bundelkhand	847
Total ...	22,847

[Appendix A.

Para. 16.

Statement of Works prescribed in Plans of Operations for 1891-92 unexecuted.

Works prescribed not done.	Remarks.
Naini Tal Division.	
Roads and Paths.	
Road Pangoth to Titkakhet	Partly done; will be finished in 1892-93.
„ Bajaun to the Dechauri-Khairna district road...	Begun; will be completed in 1892-93.
„ Bánikhet Nursery to Oopat	Abandoned in favor of a road from Sishi Devi towards Chaubattia
Surveys and Working Plans.	
Survey of the boundaries of the Airadeo Forests to be completed and all existing maps to be posted up to date.	Partly done; will be continued in 1892-93.
Kumaun Division.	
Buildings.	
Revenue Depôt at Káthgodám	Abandoned.
Extension to Aonla Khera rest-house	Postponed
Outhouses to Shiuntra ditto ..	Postponed for want of funds.
Revenue Depôt at Sadlimat to be enlarged ..	Postponed.
Rest-house to be built at Sadlimat	Ditto.
Outhouses for Sainapani rest-house	Ditto.
Rest-house at Shiala	Sanction received too late in the year to begin the work; will be done in 1892-93.
Roads.	
Branch 3 feet path from Dhapla to Chaunalla ...	Postponed for want of funds.
Path for laden ponies from Miuri to Bareth and Tawaghdh.	Partly done; will be finished in 1892-93.
Two feet path to be made along the fire line from the Chaurikhan peak to the Garkharak rau.	Money not available; postponed.
Extension of 5 feet path from Shiuntra to Dargaon,	Partly done.
Ditto Nindhaur cart road ...	Abandoned.
Sara river road	Not done for want of funds.
Road Orakhan pass to the junction of the Sara river road.	Ditto ditto.
Wells.	
Dholpokhra well	Not done for lack of funds.
Sarkhet and Pilapani wells	Started, but not completed.
Jubileeganj well	Ditto ditto.
Surveys.	
Level survey of a line from Sunkheri to Lalkua ...	Abandoned.
Boundaries of the grass lands burnt in the Jaunla Sál east and west and Sadlimat to be surveyed in and permanently marked on the ground.	Proceeded with; but not finished.
Fencing.	
Fencing of Herai and Dholpokhra chaukis ...	Disapproved of and abandoned.
Garhwal Division.	
Buildings.	
Forest rest-house at Jalikhan	Partly done; will be completed in 1892-93.
Improvement to Dhikala bungalow ..	Commenced, but not finished within the year; since completed.
Improvements to Mohan bungalow	Commenced, but not finished within the year.
Wells.	
Shikáridera well	All but completed within the year.
Ganges Division.	
Roads.	
Export path from Simalchaor to Dasota ...	Postponed for want of labour.
Fire conservancy.	
Making permanent some of the old provisional fire lines.	Postponed for want of funds.

STATEMENT OF WORKS PRESCRIBED IN PLANS OF OPERATIONS FOR 1891-92 UNEXECUTED—(*concluded*).

Works prescribed not done.	Remarks.
Ganges Division—(*concluded*).	
Climber cutting.	
Dabina, North Kohtri, Kansur and Mandalti Blocks,	Done; except Mandalti block, compartments 1, 2 and 3 owing to lack of funds; consequent on the density of the climber growth in the areas actually cut over.
Miscellaneous.	
Sample plot in Gwalgarh for recording growth of sál,	Selection postponed owing to press of other work.
Contract for gums of Jhingan and Saonjna ...	No applications received.
Bundelkhand Division.	
Buildings.	
Chauri rest-house in the Banda Range	Not constructed owing to funds having been provided too late in the season.

[Appendix B.
Para. 31.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

STATEMENT OF AREAS CLOSED TO GRAZING DURING 1891-92.

Divisions.	Total area of the Division.					Area closed to grazing.					Percentage of area closed.			
	Reserved.	Protected.	Unclassed.	Total.		Reserved.	Protected.	Unclassed.	Total.		Reserved.	Protected.	Unclassed.	Total.
	Acres.	Acres.	Acres.	Acres.	Sq. m.	Acres.	Acres.	Acres.	Acres.	Sq. m.				
Naini Tal ... { Naini Tal Sub-Division ...	33,823	19,442	...	53,265	83	...	147	...	147	...	...	0·76	...	0·28
Bánikhet ditto ...	4,931	38,065	...	42,996	67	4,931	1,781	...	6,712	11	100·00	4·68	...	15·61
Total, Naini Tal ...	38,754	57,507	...	96,261	150	4,931	1,928	...	6,859	11	12·72	3·35	...	7·13
Kumaun	302,396	...	...	302,396	473	178,310	...	...	178,310	279	58·96	...	...	58·96
Garhwál	314,357	...	...	314,357	491	259,160	...	...	259,160	405	82·44	...	...	82·44
Ganges	277,878	...	2,050	279,928	437	155,798	...	...	155,798	243	56·07	...	...	55·66
Bundelkhand ... { Jhánsi	30,602	...	...	30,602	48	2,040	...	...	2,040	3	6·67	...	...	6·67
Lalitpur	89,908	2,362	...	92,270	144	2,004	...	...	2,004	3	2·23	...	...	2·17
Bánda	54,997	...	20,457	75,454	118	...	...	...	...	...	...	...	...	...
Total, Bundelkhand ...	175,507	2,362	20,457	198,326	310	4,044	...	...	4,044	6	2·30	...	...	2·04
GRAND TOTAL ...	1,108,892	59,869	22,507	1,191,268	1,861	602,243	1,928	...	604,171	944	54·31	3·22	..	50·72

ABSTRACT OF AREA CLOSED.

	1890-91.		1891-92.	
	Acres.	Sq. m.	Acres.	Sq. m.
Reserves	602,246	941	602,243	941
Protected	1,715	3	1,928	3
Unclassed	...	..	...	...
Total	603,961	944	604,171	944

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT RECORD OF THE GROWTH OF SÁL IN SPECIMEN PLOTS IN THE SUB-HIMALAYAN FORESTS.

Year.	Kumaun Forest Division, plots and year of first observation.								Garhwál Forest Division, plots and year of first observation.								Ganges Forest Division, plots and year of first observation.			
	Lakhman Mandi, 1884-85.		Sunmun Thapla, 1884-85.		North Khonani 1884-85.		Salani, 1887-88.		Amtanola, 1884-85.		Raninagal, 1887-88.		Dhikala, 1887-88.		Domunda, 1887-88.		Andher Majhera, 1889-90.		Chaukhain, 1889-90.	
	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.	Thinned area.	Un-thinned area.
	Acres and number of trees.																			
	2—114	½—71	2—115	½—55	...	1—74	...	1—50	2—112	½—64	2—131	½—79	2—160	½—191	2—157	½—163	2—192	½—96	2—244	½—100
	Average annual increase in girth per tree in inches.																			
Average number of trees per acre ...	57	142	57½	110	...	74	...	50	56	128	65½	158	80	382	78½	326	96	192	122	200
1884-85 ..	·83	·42	·61	·34	...	...	...	...	·78	·37	...	...	...	...	...	...	...	...	...	...
1885-86 ..	1·08	·45	·71	·41	...	...	...	...	·98	·85	...	...	...	...	...	...	...	...	...	...
1886-87 ..	·68	·28	·43	·28	...	...	...	...	·54	·38	...	...	...	...	...	...	...	...	...	...
1887-88 ...	·91	·61	·84	·61	...	·47	...	·24	·90	·30	·90	·40	·60	·50	·60	·50	...	...	...	...
1888-89 ...	·85	·67	·81	·35	...	*·05	...	*·02	1·08	·67	1·15	·72	1·33	·52	·90	·50	...	...	...	...
1889-90 ...	·94	·23	·71	·33	...	·61	...	·23	·54	·18	1·07	·79	1·24	·74	·78	·29	·59	·47	·59	·29
1890-91 ...	·55	·13	·49	·14	...	·19	...	·10	·73	·41	·96	·35	1·20	·60	·97	·54	·50	·59	·62	·25
1891-92 ...	·66	...	·67	·28	...	·72	...	·18	·84	·35	1·13	·61	1·19	·49	·89	·18	·59	·52	·62	·51
Average total increase in the various plots per tree,	·81	·35	·66	·34	...	·39	...	·15	·79	·36	1·04	·57	1·15	·57	·88	·40	·56	·58	·61	·35
Total increment per acre in inches ...	46·17	49·70	37·95	37·40	...	28·86	...	7·50	44·24	46·08	68·12	90·06	92·00	217·74	65·15	130·40	53·76	101·76	74·42	70·00
Number of years or measurements on which based ..	8	8	8	8	...	5	...	5	8	8	5	5	5	5	5	5	3	3	3	3

* Decreases.

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

PRODUCE REMOVED BY FREE GRANTEES AND RIGHT-HOLDERS, 1891-92.

Name of grantee.	Description of produce.	Naini Tal Division.		Kumaun Division.		Garhwál Division.		Ganges Division.		Bundelkhand Division.		Total of each class of produce.	
		Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount.	Value.
		C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
Right-holders.	I.—Timber	114,304	13,895	30,115	10,536	8,013	2,360	5,231	1,656	202	46	157,865	28,493
	II.—Firewood	17,250	719	835,666	8,500	378,855	3,946	128,055	1,334	...	...	1,359,826	14,499
	III.—Minor forest produce, such as bamboos, bark, fruit and lime-stone.	...	271	...	10,000	...	5,000	...	797	...	1	...	16,069
	IV.—Grass, grazing and leaf fodder	...	6,462	...	11,000	...	10,000	...	3,108	...	1	...	30,571
	V.—Branches, leaves and vegetable mould for manure ...	...	81	...	...	...	...	...	...	...	...	...	81
	Total ...	131,554	21,428	865,781	40,036	386,868	21,306	133,286	6,895	202	48	1,517,691	89,713
Concessions by grant of Local Government.	I.—Timber	...	...	5,701	4,914	...	...	...	...	402	104	6,103	5,018
	II.—Firewood	...	...	...	...	...	...	...	...	800	20	800	20
	III.—Minor forest produce, such as bamboos, bark, fruit and lime-stone.	...	...	6,560	410	...	...	...	...	...	...	6,560	410
	IV.—Grass, grazing and leaf fodder	...	...	...	...	...	...	...	...	...	...	...	...
	V.—Branches, leaves and vegetable mould for manure ...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	12,261	5,324	...	...	...	...	1,202	124	13,463	5,448
Free grants under executive orders.	I.—Timber	14,988	1,613	3,078	1,801	12,592	5,373	7,846	2,789	...	...	38,504	11,576
	II.—Firewood	...	...	4,970	187	...	...	...	...	...	...	4,970	187
	III.—Minor forest produce, such as bamboos, bark, fruit and lime-stone.	...	...	...	15	...	11	...	...	...	...	...	26
	IV.—Grass, grazing and leaf fodder	...	...	...	...	...	...	...	...	...	...	...	...
	V.—Branches, leaves and vegetable mould for manure ...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	14,988	1,613	8,048	2,003	12,592	5,384	7,846	2,789	...	..	43,474	11,789
	GRAND TOTAL ...	146,542	23,041	886,090	47,363	399,460	26,690	141,132	9,684	1,404	172	1,574,628	1,06,950

ABSTRACT FOR THE CIRCLE.

Description of produce.	To right-holders.		Under concessions granted by Local Government.		By free grants under executive orders.		Total of each kind of produce.	
	Amount.	Value.	Amount.	Value.	Amount.	Value.	Amount.	Value.
	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
I.—Timber	157,865	28,493	6,103	5,018	38,504	11,576	202,472	45,087
II.—Firewood	1,359,826	14,499	800	20	4,970	187	1,365,596	14,706
III.—Minor forest produce, such as bamboos, bark, fruit and lime-stone	...	16,069	6,560	410	...	26	6,560	16,505
IV.—Grass, grazing and leaf fodder	...	30,571	...	...	...	...	...	30,571
V.—Branches, leaves and vegetable mould for manure	...	81	...	...	...	...	...	81
GRAND TOTAL ...	1,517,691	89,713	13,463	5,448	43,474	11,789	1,574,628	1,06,950

FOREST DEPARTMENT, CENTRAL CIRCLE, N.-W. PROVINCES AND OUDH.

STATEMENT SHOWING YIELD OF BAMBOOS AND ESTIMATED VALUE DURING THE EIGHT YEARS 1884-85 TO 1891-92.

Division.	1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		1890-91.		1891-92.		Total.	
	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value.	Scores.	Value
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs		Rs.
Naini Tal	...	...	...	..	...	...	...	...	...	...	288	75	1,349	133	1,574	104	3,211	31[illegible]
Kumaun	1,93,543	17,520	94,099	8,872	1,02,740	9,490	85,936	8,081	60,869	5,988	44,396	4,688	1,02,626	8,461	66,529	4,980	7,50,738	68,080
Garhwál	2,02,832	17,197	2,32,148	22,225	2,55,866	25,173	1,85,487	18,396	1,55,714	15,116	1,43,906	14,507	1,65,622	19,230	1,57,362	17,926	14,98,038	1,49,570
Ganges	3,74,165	28,399	4,19,903	40,306	6,54,286	61,650	6,20,159	61,085	5,41,924	61,437	5,12,878	67,412	5,28,412	79,106	4,97,612	76,543	41,49,339	4,75,838
Bundelkhand	42,414	4,153	45,355	4,863	45,823	6,230	39,874	5,353	36,346	5,127	57,372	7,364	26,617	3,870	40,068	8,862	3,33,869	45,822
Total .	8,12,954	67,269	7,91,505	76,266	10,58,715	1,02,443	9,31,456	92,915	7,94,853	87,668	7,57,940	94,046	8,24,627	1,10,900	7,63,145	1,08,415	67,35,195	7,39,922
Average rate per 100 score ...	Rs. 8 09		Rs 9 02		Rs. 9 67		Rs. 9·97		Rs. 11·03		Rs. 12·40		Rs. 13 44		Rs. 14 20		Rs. 10·98	

No. 64L.G. of 1892-93.

From

S. EARDLEY-WILMOT, Esq.,

Conservator of Forests,

North-Western Provinces and Oudh,

Oudh Circle,

To

The SECRETARY TO GOVERNMENT,

North-Western Provinces and Oudh,

Revenue (Forests) Department.

Dated Naini Tal, the 7th July 1892.

Sir,

I have the honor to submit the Annual Progress Report on Forest Administration in the Oudh Circle for 1891-92.

I have the honor to be,

Sir,

Your most obedient servant,

S. EARDLEY-WILMOT,

Conservator of Forests,

N.-W. P. and Oudh,

Oudh Circle.

OUDH CIRCLE REPORT

TABLE OF CONTENTS

CHAPTER I

AREA AND BOUNDARIES

1—Area.

	PARA.	PAGE
Table showing changes in area	1	1
Explanation of changes	2	*ib*
The actual area gained	3	2
Information regarding State lands not under the control of the Department	4	*ib*
Proposals for the reservation of these lands	5	*ib.*
2—Boundaries		
General condition of boundary marks	6	2
Proposals for permanent demarcation	7	*ib*
Important changes of boundary under negotiation	8	3

CHAPTER II

SURVEYS, WORKING PLANS, AND ANNUAL PROGRAMME OF WORKS

1—Surveys and Settlements		
The proposed survey of the forests of the circle	9	3
The settlement of Pilibhit and Puranpur	10	*ib*
2—Working Plans		
Reasons for working plans in various forests and proposals that they should be compiled by Divisional Officer	11 & 12	3
3—Annual Programme of Works		
Annual programme of works to include proposals for revenue in future	13	4

CHAPTER III

PROTECTION AND IMPROVEMENT.

1—Establishment		
The charge of the Circle and Divisions	14	4
Changes in the staff	15	*ib*
The subordinate establishment and the reason of its inferiority	16 & 17	*ib.*
Conduct of the establishment	18	5
Its health	19	*ib*
2—General protection and breach of Forest Law		
Comparative statement of cases	20	5
3—Protection from fire		
General remarks as to system of conservancy	21—23	6
4—Grazing and Fencing		
The area closed to grazing	24	6
Proposals for regulating grazing	25	*ib*
The revenue from grazing	26	7
Fencing practically non-existent	27	*ib*
5—Natural Reproduction		
The flowering of sál	28	7
The general excellence of natural reproduction	29	*ib.*
The preponderance of advance growth of inferior species over sál	30	*ib*
Extension of reproduction in open areas	31	*ib.*
6.—Artificial Reproduction		
Details of plantation operations	32	8
7—Improvement Fellings		
General remarks on improvement fellings	33	8
Divisional details of the above	34	*ib*
The necessity for working plans	35	9
The financial difficulty	36	*ib*

	Para.	Page.
8.—*Climber Cutting.*		
Details by Divisions and cost	37	9
9.—*Experiments and Exotics.*		
Details from Gonda and Gorakhpur	38	9
10.—*Communications, Buildings, and Oother Works.*		
(a)—Roads and Bridges.		
Details by Divisions	39	10
(b)—Buildings.		
Details by Divisions	40	10
The necessity for providing quarters for the establishment ...	41	11
List of buildings in the circle	42	*ib.*
(c)—Other Works.		
Details by Divisions	43	11
CHAPTER IV.		
Outturn and Working.		
Outturn of timber and fuel	44	11
„ in minor forest produce and grazing...	45	12
Summary of the main facts of the year's outturn and working ...	46	*ib.*
Details of outturn and working by Divisions	47	13
Classification of green timber and fuel under different methods of felling and agency	48	15
The outturn of timber obtained by drift operations	49	*ib.*
The estimated free grants of the year	50	16
CHAPTER V.		
Financial Results.		
Comparison of the average financial results of the past six years ...	51	16
Revenue and expenditure by Divisions compared with the previous year	52	*ib.*
Details of revenue by Divisions	53	17
The financial results of the drift operations	54	18
The comparative financial importance of Divisions	55	*ib.*
Comparative statement of receipts and charges by main heads and tables showing receipts and expenditure by main budget heads ...	56	19
Value of the transactions of the year	57	20
CHAPTER VI.		
General Remarks.		
Visit of the Inspector-General to Kheri and Pilibhít forests ...	58	20
Inspection of Divisional Offices by the Conservator	59	*ib.*
Construction of a railway from Mailani to Dudna and extension of Bengal and North-Western Railway in Bahraich	60	21
Settlement of administrative matters during the year	61	*ib.*
Acknowledgment of the interest taken in forest matters by the several Commissioners and District Officers	62	*ib.*
ANNUAL STATEMENTS.		
Forms Nos. 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, and 62.		
Appendices.		
A.—Statement of produce given to right-holders and grantees and concessions by grant of Local Government.		
B.—Fire Conservancy Report.		

ERRATA.

Oudh Circle Forest Report for 1891-92.

Page 8, para. 32, line 3, *for* "536" *read* "636."

" 10, " 40, *for* total "4,881" and "8,222" *read* "5,223" and "7,880."

" 11, " 43, *for* "46" *read* "57."

" " " " *for* "180" *read* "190."

" " " " Omit last sentence under Bahraich.

" " " " " " " " Gorakhpur.

Page 12, para. 46, No. 17, *for* "1,02,006" *read* "1,22,006."

" " " " " 18, *for* "30,856" *read* "30,586."

" " " " " 38, *for* "2,601" *read* "3,127."

" " " " " 41, *for* "5,717" *read* "577."

" " " " " 42, *for* "2,469" *read* "249."

" 19, " 56, first table, *for* "2,39,951" *read* "2,75,098."

" " " " " *for* "5,096" *read* "40,843."

" " " " " *for* "77,561" *read* "61,643."

" " " " " *for* "18,851" *read* "34,769."

" " " " " *for* "83,625" *read* "64,396" and *for* "11,576 increase" *read* "7,053 decrease."

Form 51, *for* Bari Babban "1,833·71" *read* "1883·71" in each column

" " *for* Jungle Majhár "2,225·91" *read* "2,255·91."

" " *for* Sonari "25,209·06" *read* "25,029·06" in each column.

" 52, against Gorakhpur in last column *for* "153" *read* "253."

" " " total *for* "174" *read* "274."

" " " grand total *for* "197" *read* "297."

" " add in the remark column against Gorakhpur "Rs. 168 spent in experimental plantations."

" " against grand total of plantations *for* "536" *read* 636."

OUDH CIRCLE.

N.-W. PROVINCES AND OUDH.

ANNUAL PROGRESS REPORT
OF
FOREST ADMINISTRATION,

For the year ending 31st March 1892.

CHAPTER I.

AREA AND BOUNDARIES.

1.—Area.

The area of the circle is unknown, and until the forests are surveyed and the areas carefully computed it would have been preferable to retain the approximate figures hitherto accepted in Oudh, so as to allow of annual comparison of statistics had not one important error in calculation been detected, and had not the recent visit of the settlement survey to the Gorakhpur district enabled more accurate areas to be quoted for those forests. The statement given below will afford full detail of the changes during the year :—

Divisions.	Area on 1st April 1891.	Added during 1891-92.	Excluded during 1891-92.	Area on 31st March 1892.	Remarks.
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	
		I.—Reserved Forests.			
Pilibhit	151	...	1	150	No. $\frac{77 F.}{3e7-3}$, dated 30th January 1892, and No. $\frac{442F.}{434A.-2}$, dated 23rd May 1892.
Bhira	151	...	...	151	
Kheri	263	21	...	284	
Bahraich	327	...	...	327	
Gonda	155	...	...	155	
Gorakhpur	157	13	..	170	No. $\frac{321F.}{991-6}$, dated 24th April 1891.
Total of reserves ...	1,204	34	1	1,237	
		II.—Protected Forests. *Nil.*			
		III.—Unclassed Forests.			
Pilibhit	...	1	...	1	
Bahraich	...	4	...	4	No. $\frac{215F.}{14A.-12}$, dated 31st March 1890.
Total of unclassed ...	...	5	...	5	
Grand Total ...	1,204	39	1	1,242	

2. In **Pilibhit** 468 acres have been excluded from reserves and placed under unclassed forests, as it was discovered that this area acquired by the Department in 1881 has not yet been gazetted under Chapter II of the Forest Act. 55 acres were transferred to the Rohilkhand Railway, and 29 acres to the Public Works Department for construction of roads.

In **Bhira** though land was taken up for the construction of the Mailani-Dudua siding, it has not yet been formally handed over to the Company.

In **Kheri** the area remains in reality the same; but owing to the omission to include in reserves the forest of Sumerpur, gazetted in 1879, and owing also to more accurate information afforded by the work of the Forest Survey Branch in 1886, 13,696 acres have been added to the previously accepted area of the Division.

In **Bahraich** 2,421 acres, being the area of four Government villages handed over to the charge of this Department, are added to unclassed forests pending their notification as reserves.

In **Gonda** no change has taken place.

In Gorakhpur 5,430 acres were added to reserves on account of the transfer of Domakhand and Gopalganj to the Forest Department. The further increase of 3,080 acres is nominal, being referable to corrections in computations.

3. The actual gain in area amounts therefore to 7,767 acres, although an increase of 24,543 acres is shown. Draft notifications for the reservation of the areas under unclassed forest will shortly be forwarded for sanction.

4. In terms of instructions conveyed in Resolution No. 138F., dated 5th February 1892, the Commissioners of Lucknow, Fyzabad, Rohilkhand, and Gorakhpur were communicated with for the collection of information in reference to such forest and pasture lands which might, in their Divisions, be still at the disposal of the State. The result is given below.

In the Gorakhpur Civil Division there is no forest or pasture land at the disposal of the State.

In the Lucknow Civil Division such forest and pasture lands exist only in the two districts of Kheri and Sitapur. In the former there is a total area of 3,320 acres of forest and 2,560 acres of pasture land under the control of the District Officers. Cultivation is not encouraged in these areas; they are, as a rule, leased for grazing and the extraction of forest produce, but they are not apparently specially protected. In the Sitapur district there are about 880 acres of forest land and 180 acres of pasture land, the property of the State; and only about 130 acres is reported to be suitable for reservation, the remainder being leased on life tenures or otherwise disposed of.

In the Fyzabad Civil Division there are in the Gonda district 212 acres of forest and 1,135 acres of pasture lands, which are State property. Cultivation is not encouraged; and the grazing and minor forest produce is annually auctioned. In the Bahraich district there are some 1,400 acres of scrub jungle and 675 of grass lands, which are now being brought under cultivation.

In the Rohilkhand Civil Division there are no State forest and pasture lands save in the Bijnor district, and these will probably be reported on by the Conservator of the adjoining circle.

5. The propriety of reserving these areas whilst leaving them under the management of the district authorities appears worthy of consideration. As cultivation increases and the grazing grounds become more and more restricted, the necessity of instituting a less wasteful and barbarous method of utilizing fodder grasses than by grazing and burning will become apparent; and it might be well that the District Officer should have the power of enforcing the provisions of Chapter II of the Forest Act in the State areas under his charge, even though it may not be at this time absolutely necessary to do so.

2.—Boundaries.

6. The boundaries of the forests of the circle are in bad order; in few instances are they permanently demarcated with masonry pillars, and even where this is the case, the pillars are frequently in disrepair. The most usual method of demarcating these State forests appears to be with mounds of earth and wooden posts, with or without ditching between, and this can at the best be only a temporary arrangement, a continual source of expense if kept up and a wretched failure if not constantly attended to.

7. Only Rs. 543 were expended on demarcation during the year, and it will be absolutely necessary that the operations of the Forest Survey in this circle should be accompanied by the erection of numbered masonry pillars, for without these the maps will lose much of their value, and neither the Divisional Officer nor his staff are able to check the boundaries of their charge or be held entirely responsible that the boundary marks are in good order. That this will be an expensive operation there can be no

doubt; but if the expenditure be considered as distributed over the last 25 years, during which period chiefly temporary demarcation works have been undertaken, the cost will not seem to be excessive.

8. It is unnecessary here to enumerate the petty works which were carried out during the year under this head, or to advert to the few unimportant boundary disputes already reported to Government and now under settlement; but reference should be made to the important changes of boundary proposed in the Kheri and Gonda Divisions by exchanges of land with the Khairigarh and Balrámpur estates. These proposals will, if sanctioned, simplify the boundary, consolidate the forest area, and render protection and management easier without decreasing the area of reserves. It is hoped that the negotiations now in hand may have a successful termination.

CHAPTER II.

SURVEYS, WORKING PLANS, AND ANNUAL PROGRAMMES OF WORKS.

1.—Surveys and Settlements.

9. No surveys were carried out during the year. In Pilibhít and Bhira orders were issued for a boundary survey of the grass and scrub lands in these forests, so that the area under tree growth could be ascertained; but there was a difficulty in obtaining surveyors. The survey of the forests of the circle on the 4 inch scale is urgently required, and the matter is now under the consideration of Government. The present time is opportune for the execution of this work, as it is probable that more activity in the preparation of working plans will be shown in the future, and the accurate survey of the boundaries of the reserves is also most important.

10. There were no new settlements. The working of the settlements of the Pilibhít and Puranpur forests attracted some attention, and it has been proposed to make such alterations in the latter as will allow of the introduction of the indent system amongst right-holders in order to regulate the issue of free produce. Both settlements require revision; the reasonable limitation of grazing, the prohibition of firing open compartments, and the grant of free timber only within the annual yield of the forests are questions of the greatest importance, and unless steps are shortly taken to adjust these matters, those forests of the Pilibhít Division which are burdened with rights will soon cease to exist.

2.—Working Plans.

11. There are no working plans in this circle; but there is every reason why there should be, and no reason why the Divisional Officers should not compile them. The smallness of the Divisions, the uniformity of the forests, the excellent markets for produce created by the exertions of Captain Wood, together with the experience gained by working these forests for many years, would render this labour easy.

12. At present two working plans for the forests of Kheri and Gorakhpur are under revision; and it is hoped that the former will be completed this autumn, and the latter during the winter. The preparation of a working plan for the Motipur, Chakkia, and Charda forests would probably present no difficulties to the Divisional Officer who has an acquaintance of six years with these forests. In Bhira, where the railway requires large quantities of fuel and where the forests require improvement fellings, it would be easy to prescribe the work of the next few years in a short plan. The unburdened reserves in Pilibhít might with advantage be similarly treated; whilst in Gonda work and protection might readily be systematized for those forests where the operations of the immediate future will be carried out. The time of Divisional Officers in this circle has, no doubt, been much taken up with the clerical labour incidental to departmental operations; but this system is now on the decline, and although the appointment of a special Working Plans Officer to this circle would be a boon most highly appreciated, there is no reason why, if such an officer cannot be spared, Divisional Officers should not be required to draw up short working plans for the forests under their control.

3.—Annual Programmes of Works.

13. The only programmes of works in this circle are those giving details of the expenditure by Divisions forwarded with budget estimates. Proposals for collection of revenue and the treatment and protection of the forests do not appear to have been customarily submitted, but this will be done in future.

CHAPTER III.

PROTECTION AND IMPROVEMENT.

1.—Establishment.

14. The following statement shows the charges held by officers of the circle throughout the year :—

Direction ...	Captain Wood, 1st to 30th April 1891. Mr. W. Shakespear, 1st May to 3rd August 1891. " S Eardley-Wilmot, 4th August 1891 to 31st March 1892.
Pilibhít ...	" W. Shakespear, whole year.
Bhira ...	" " "
Kheri ...	" A. Campbell, 1st April 1891 to 5th March 1892. " Keshawanand, 8th to 31st March 1892.
Bahramghát ...	Babu Raghobar Dyal, whole year.
Bahraich ...	Mr. B. A. Rebsch, "
Gonda ...	" K. Mukerji, 1st April 1891 to 27th July 1891. " B. A. Rebsch, 28th July 1891 to 27th August 1891. " K. Mukerji, 28th August 1891 to 31st March 1892.
Gorakhpur ...	" M. Hill, 1st April 1891 to 11th August 1891. " R. Pathak, 12th August 1891 to 11th November 1891. " M. Hill, 12th November 1891 to 24th March 1892. " Tulloch, 25th to 31st March 1892.

15. During the year the staff of the circle lost one Deputy Conservator by the death of Mr. A. Campbell, and one Extra Assistant Conservator by the transfer of Mr. R. Pathak; whilst it gained by the posting of Mr. Tulloch, Assistant Conservator, and of Messrs. Keshawanand and Har Sarup, Extra Assistant Conservators.

16. The statement below gives the sanctioned and actual expenditure in establishment during the past two years :—

Year.	Executive and protective.			Office establishment.		
	Permanent.	Temporary.	Actual expenditure.	Permanent.	Temporary.	Actual expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1890-91	21,665	20,195	36,020	5,076	5,092	10,334
1891-92	24,848	22,271	30,467	6,108	5,557	10,483

The numerical strength of the staff of the circle was 346 men in the executive and protective staff and 34 men in the clerical staff, and as the full grant was not worked up to, complaints should apparently be directed rather to the inefficiency than to the insufficiency of this staff. The circle had the advantage of the services of three trained rangers and one trained forester; it had no students under training at the forest school; and although there happily exist trustworthy subordinates of known energy and honor, yet there would appear to be a certain proportion of officials whose work is signalized by stupidity or want of straightforwardness, whilst technical knowledge of the most elementary kind is chiefly noticeable by its absence.

17. Much of the want of discipline and laxness in work which is apparent in parts of the Oudh Circle is referable to the inferior class of men from whence the foresters are recruited, and to the—in some instances—unsuitable promotions to the ranger class; whilst the omission to frequently transfer the beat officers makes these men too often careless in their work and too intimate or oppressive in their relations with the surrounding population. Out of a total of 25 foresters only 12 are in the

permanent establishment; and where the non-commissioned officers lack education and are liable to removal from year to year, it cannot be expected that the men under their orders should improve either in work or training.

18. From the Kheri and Gorakhpur Divisions where the annual reports were written by officers entirely new to the Division, no remarks have been offered regarding detected irregularities amongst the establishment. The Conservator had himself, during his tour in the former Division, occasion to point out many undesirable features in the management which are now being enquired into and rectified. In Bahraich the establishment is well reported on. In Gonda seven men were dismissed for misconduct; whilst in Pilibhít the services of 14 men were dispensed with, one was prosecuted for embezzlement; and in Bhira five were dismissed and one resigned. More attention must be paid to the discipline of the subordinate staff; their responsibility must be clearly defined and insisted on, and their relations with the tenantry in the vicinity of the forest must be carefully watched.

19. The year was fairly healthy, with the usual, but not excessive, malarial troubles which afflict all those who dwell in these forests.

2.—General Protection and Breaches of Forest Law.

20. The following statement shows the results of the two last years :—

Division.	Year.	Pending and new cases.	Prosecutions.						By what Court.	Cases compounded under section 67, Act VII of 1878.		
			Convictions.		Acquittals.		Cases pending					
			Cases.	Persons.	Cases.	Persons	Cases.	Persons.		Cases.	Persons.	Rupees.
Pilibhít ...	1890-91 ...	4	3	5	1	11	...	...	Deputy Magistrate ...	8	40	86
	1891-92 ...	2	1	1	...	...	1	...	Do. do. ...	7	11	15
Bhira ...	1890-91 ...	...	...	...	...	...	...	...	Do. do. ...	16	50	153
	1891-92 ...	2	1	2	1	2	..	...	Do. do. ...	10	21	47
Kheri ...	1890-91 ...	...	...	...	...	...	...	.	Do. do. ...	2	4	1
	1891-92 ...	3	1	9	2	5	..	..	Do. do. ...	14	34	321
Bahraich ...	1890-91 ...	51	49	68	2	3	...	...	Do. do. ...	...	...	...
	1891-92 ...	46	41	89	5	32	...	...	Do. do. ...	8	27	41
Bahramghát	1890-91 ...	22	15	18	7	8	...	...	Deputy Magistrate of Sitapur, Kheri, &c.	1	1	5
	1891-92 ...	6	1	1	4	10	1	...	City Magistrate of Lucknow ...	...	...	...
Gonda ...	1890-91 ...	8	8	12	...	1	...	...	Deputy Magistrate ...	25	68	272
	1891-92 ..	12	11	21	1	2	...	...	Do. do. ...	55	95	290
Gorakhpur ...	1890-91 ...	10	10	34	...	...	...	...	District Magistrate, Joint and Deputy Magistrates and Assistant Magistrates.	41	75	351
	1891-92 ...	6	5	11	1	1	...	...		25	42	153
Total ...	1890-91 ...	95	85	137	10	23	...	...	...	93	247	868
	1891-92 ..	77	61	134	14	52	2	...	...	119	230	876

and from this it will be evident that the number of cases before the Courts fell from 95 with 90 per cent. of convictions to 77 with 80 per cent. of convictions; whilst cases compounded rose from 93 to 119. The Gonda Division returns show that not only was care taken in the criminal prosecutions, but that the valuable powers conferred under section 67 of the Forest Act were appreciated; whilst in other Divisions the detected offences appear to be so rare as to warrant a suspicion that, owing perhaps to the laxity or dishonesty of the protective establishment, many petty breaches of forest law may not have been brought to the notice of the Divisional Officers; for the people of Oudh are not more tractable and law-abiding than those in the North-Western Provinces, where many more cases are annually disposed of by the Forest Officer.

3.—Protection from Fire.

21. In the more important forests of the circle the system of fire conservancy has been to clear the area outside the protected forest by firing early in the season and to trust to the network of 15 feet roads within the forest as a means of arresting any fire which might occur within the main forests. In some localities these forests are divided into large blocks by burning broad strips of tree growth in straight lines across the area under fire conservancy. This method is not entirely satisfactory, in that a 15 feet road is of no use either in arresting a fire or, unless in very exceptional circumstances, as a base for counterfiring; whilst burning of broad strips of tree forest is not only a very dangerous operation, as it cannot be carried out until the whole area under protection is ready to burn, but also when successfully completed it is comparatively useless, as the falling leaves speedily form an inflammable covering over which subsequent fires can readily pass.

22. The soundest principles on which fire conservancy can be based are those which permit of all protective operations being completed before the area under protection can burn, and this can only be the case when fire lines of sufficient breadth are clear felled and the luxuriant growth of grass annually cut and burnt on the fire lines in the winter when the forests are still green. A system of 100 feet and 50 feet fire lines has accordingly been devised for three Divisions of the circle, and work on these was commenced during the year and will be continued next season. When these are completed all protective measures should be finished by the end of February in each year, and the constant fear of conflagrations caused by accidents occurring in operations conducted so late as the middle of April will be prevented.

23. Details of the fire conservancy of the season will be found in Form 51 and appendix to this report.

4.—Grazing and Fencing.

24. The following table shows the area closed to grazing by Divisions:—

Division.	Total area.	Area closed to grazing.	Percentage of area of Division closed.	Acres per head of cattle grazed.	Remarks.
	Sq. miles.	Sq. miles.			
Pilibhít	151	68	45	Unknown.	Other 34 square miles partially closed.
Bhira	151	71	47	3	
Kheri	284	113	40	1·6	
Bahraich	331	121	36	80	
Gonda	155	82	52	1·1	
Gorakhpur	170	58	34	1·78	
Total ...	1,242	513	41		

The number of cattle grazed in Pilibhít and Bahraich is not known, as in the former Division the maximum head of cattle permitted to graze is fixed and actuals were not enumerated, and in the latter the enumerations and collections are carried out by the tahsíldárs who had not furnished the statistics required.

25. The percentage of divisional areas closed to grazing is too small, and there is apparently no reason why, except in times of scarcity, grazing should be permitted to any cattle but those the *bonâ fide* property of the tenantry who are resident within such distance as renders the daily journey to and from the forest possible. If this ruling were strictly enforced the area of the grass lands outside tree forest would in many places be ample to supply grazing to these herds and tree growth would have some chance of improvement. It was never intended that the State forests should be grazed over by large herds of cattle which are brought from long distances and settle within or in the vicinity of the forests; nor have the privileged villagers the right to collect their cattle at convenient centres from whence to graze over the forest at

their pleasure. The department is to blame in having permitted the settlement of outsiders in forests already fully burdened with privileged grazing and also in not insisting on the privileges being administered in the spirit they were granted, which is on the assumption that a grazing ground is of no value if beyond a distance of three miles. The matter can readily be adjusted by defining the forest blocks in which privileges can be enjoyed, a detail which should not have been omitted from the original notification. This question and that of extending the area under tree growth which may be closed to grazing will be referred to the District Officers, one of whom, the Deputy Commissioner of Bahraich, endorses the annual report of his District Forest Officer with the remark that "more forest should be closed to grazing."

26. The revenue from grazing compares with last year as under—

1890-91.	1891-92.
Rs.	Rs.
50,305	52,726

The difference is due to collection of unrealized dues from last year. Some questions regarding the working of the grazing rules in Oudh formed the subject of correspondence with District Officers, and these questions have been satisfactorily settled, though it is evident that some latitude must be allowed in carrying out the details of the regulations. In Gonda the check on the cattle of Balrámpur privileged villages is insufficient, and it would probably be advisable to introduce for the cattle of that estate the same rules as are in force in other parts of the Province.

27. There is practically no fencing in the circle with the object of excluding cattle.

5.—Natural Reproduction.

28. The winter was mild and frosts not frequent or severe. Sál seeded fairly well in the spring of 1891, but, owing to the late arrival of the monsoon, few seedlings sprung up; and again, owing to the absence of the winter rains and to the abnormal dryness and heat of the spring of 1892, the sál tree flowered profusely early in the year, so that seed was in some places already formed in April, when the chance of germination was small.

29. Divisional Officers agree in the excellent natural reproduction present in protected areas and its hopelessness in areas open to fire and grazing. The writer of this report visited the Oudh forests this season after an absence of nearly 12 years and can testify to the excellence of reproduction and growth in these forests which have been rationally treated. Areas which in 1880 were open to grazing and stocked with stag-headed or unhealthy trees springing from a bare and hard soil are now covered with luxuriant undergrowth of sál and other species, the timely exclusion of cattle having saved such forests to the State; just as the continuance of unlimited grazing in other forests has resulted in further deterioration and must end in their ultimate destruction.

30. Attention has been drawn in some localities to the preponderance of saplings and seedlings of inferior species over sál in protected areas, and it is apparent that some species, such as dháu, respond more readily to the advantages afforded by protection from fire and cattle than does the more important tree; whilst others, such as asaina, may owe their increased vigour of reproduction to increase in the quantity of surface moisture induced by the more luxuriant undergrowth consequent on protection. The question is not of great importance, as the due proportion of species can be regulated by improvement fellings which have the enormous advantage over strip fellings in that the favouring of the more valuable species is not possible in the latter method and is readily attained in the former.

31. The question of the extension of tree growth on open grass and scrub lands is one of much more significance. In some localities this extension is a physical impossibility owing to the nature of the sub-soil; in others it is prevented by frost, fires,

or a water-logged soil. Such areas should, as pointed out by the Inspector-General of Forests, be classified and treated on their merits. The former should, as not likely to pay for protection, be given over to grazing in exchange, if possible, for areas of tree forests burdened with rights or concessions: the latter should be protected, not necessarily all at once, but the gradual filling up of the areas should be assisted by protecting from fire and grazing a broad belt on the margin of the tree forest; and this belt should be extended as reproduction extends. The annual burning of grass plains within the forest for fire conservancy purposes should not in future be blindly carried out.

6.—Artificial Reproduction.

32. There is a decrease of 22 acres in the area of plantations due to two acres added and 24 acres of failures abandoned. The area at the close of the year was 2,715 acres, and the expenditure Rs. 536 against Rs. 2,803 of last year. There are petty plantations of a few acres in Bhira and Kheri, but only plantations of any importance in Gorakhpur, where 2,649 acres are under cultivation, 2,206 acres being under shisham at *Sakhwi*. The Divisional Officer reports very favourably of the condition of this area and notes that the thinnings undertaken in the older portion have resulted well; whilst he points out that the sale of grass has, after deducting all costs of creation, upkeep, and establishment since the commencement of operations, resulted in a net gain to Government of Rs. 10,000. The bamboo plantation at Ramgarh has not recovered the effects of last year's fire: the thinnings in the Madhaulia shisham plantation appear to have been successful, whilst the extension of the east Lehra shisham plantation was to be carried out this autumn.

7.—Improvement Fellings, Thinnings, and Strip Fellings.

33. Improvement fellings were carried out in Pilibhít, Bhira, Kheri, Gonda, and Gorakhpur, thinnings in Bahraich and Gorakhpur, and strip fellings in Gonda and Bhira. In Kheri the felling of mature asaina in the Dudua and Bhadi working circles for scantling sawing, took place.

34. **In Bahraich** these fellings have been executed with much care and reflect great credit on the Divisional Officer. The danger of excessive felling has been fully recognised, and the results of enumerations of standards per acre are given below :—

Year of felling.	Standard. per acre.	Locality.
1884	13	Nishangara sál forest, 70 to 80 years.
1891	57	Nishangara sál forest, 70 to 80 years.
1891	128	Charda pole forest, 20 to 25 years.

The fellings of 1884 were excessively heavy, and the young growth is not yet out of the reach of frost, which, however, does no injury in the more carefully worked areas. The operations in Charda are intended, whilst improving the growing stock, to supply the railway and the town of Bahraich with fuel, and there is no difficulty in disposing of all the produce; whilst in the Motipur range, owing to difficulty of carriage, the export of miscellaneous and small timber does not pay. It is, therefore, satisfactory to find that the Divisional Officer succeeded in introducing in Motipur the system of export by purchasers by selling the thinnings on an area of 20 acres for Rs. 1,025, and it is hoped that an extension of this method of sale will permit of more important operations being carried out in those forests which now urgently require improvement fellings.

In Gonda improvement fellings and strip fellings were continued over an area of about 1,100 acres in the Nawábganj forests, and the produce was delivered to the Bengal and North-West Railway or sold locally.

In Gorakhpur improvement fellings passed over 187 acres, which yielded some 925 stacked cubic feet per acre. Work was curtailed on account of there being a large supply of fuel in hand. In addition to this, 455 acres of the Rámgarh forest were lightly thinned and the produce exported by head and donkey loads to the sadar station.

In Bhira work was carried on at Gola and Mailani.

In Pilibhit there were practically no fellings.

35. The necessity of systematizing these useful operations by the compilation of short working plans has already been insisted on; until this is done this important work must rest, in the absence of a Conservator who is not intimate with the locality, entirely in the hands of a Divisional Officer who may also have just joined the Division.

36. The reproduction by coppice shoots is well reported on from all Divisions, and the financial results are satisfactory. The present difficulty to the extension of the operations is that the railway company generally refuse to burn wood fuel other than sál and shisham; that the outturn of improvement fellings yields only about 33 per cent. of these woods, and that it is only in exceptional localities that the Department can dispose of the remainder. The prices given by the railway company are extremely low, and the fuel they consume can often be sold locally at a rate 30 to 50 per cent. in excess of what they pay: it must, however, be remembered that it is the construction of these lines which has rendered our improvement fellings financially possible, and for this reason every advantage in low prices should be extended to the company.

8.—Climber Cutting.

37. In no forests of the circle that were visited during the year under report was much damage by climbers noticeable. As a rule, greater attention has been paid to the welfare of closed than to that of open forests in locating the annual climber cutting operations; and in some of the unprotected forests climbers are luxuriant. The work should progress systematically and will form part of the provisions of the working plans to be compiled.

In Kheri no climbers were cut.

In Bahraich some 9,600 acres were gone over at a cost of Rs. 600, or one anna per acre.

In Gonda 5,175 acres were cleared of climbers at a cost of Rs. 215; and the Divisional Officer reports that more extensive operations are required.

In Gorakhpur the area worked over for improvement fellings was freed from climbers, the cost of the work not being separate.

In Pilibhit no work was done.

In Bhira one hundred and nineteen acres were cut over at a cost of Rs. 14 or one anna and ten pies per acre.

The total area for the circle thus amounts to 23¼ square miles, and the average cost to about Rs. 35 per square mile.

9.—Experiments and Exotics.

38. Gonda and Gorakhpur alone note any action taken under this head.

In Gonda some sample half wroughts of dhau wood for hammer handles were supplied to the East Indian Railway. The wood is reported on as suitable for the work, and the company were agreeable to enter into a five years' contract for the supply of their requirements. Their annual demand is, however, so trivial and the conditions on which the contract was offered so unfavourable that nothing came of the negotiations. Some dhau leaves and bark were forwarded to a tannery in Cawnpore for experiment, but the result is not yet known.

In Gorakhpur the question of the artificial reproduction of sál on clear felled strips was taken up by Mr. Hill, the object being to ascertain whether the seedlings, when protected by the crop standing on each side, would survive frost and drought and show vigorous growth. The experiment was attempted in an area immediately adjoining that cleared felled many years ago where the natural sál growth has not yet succeeded in re-establishing itself owing to these adverse influences; and it is therefore extremely interesting to observe that the partial shelter afforded by the uncut strips was sufficient to secure the advantages intended in this method of regeneration. The cost of operations, however, would appear, so far as the experiments have gone, to be prohibitive.

Under this head the Divisional Officer also reports on the district arboriculture, which is superintended by the Forest Department and in places by the zamíndárs of the district. During the year the filling up of blanks was carried out and, where possible, shisham has been replaced by the more shady and valuable mango and jack trees. The Divisional Officer notes that on some sections of the roads where the welfare of the trees is in the hands of the zamíndárs the work has been shamefully neglected. The District Officers will doubtless arrange that this should not continue, for much time and money have been expended on the work which should in a few years with proper care be amply repaid by sale of fruits; and it would be a pity if the carelessness of the landowners or encroachments of the tenantry were permitted to influence injuriously these arboricultural operations, which are at once useful and ornamental.

10.—Communications, Buildings, and Other Works.

(a)—*Roads and Bridges.*

39. The total expenditure on roads is as noted below :—

Division.	Upkeep of existing roads and bridges.		Construction of new roads.		Expenditure on bridges.	Total.	Remarks.
	Miles.	Rs.	Miles.	Rs.	Rs.	Rs.	
Pilibhít ...	151	188	...	...	77	265	The cost in 1889-91 amounted to Rs. 11,271. The increase in Kheri is due to expenditure on the Srinagar bridge charged to this heading.
Bhira	230	294	...	...	...	294	
Kheri	280	2,176	...	...	7,062	9,238	
Bahraich ...	332	1,944	4·5	549	150	2,643	
Gonda... ...	201	540	15·5	398	61	999	
Gorakhpur ...	...	...	9·5	93	...	93	
Bahramghát ...	1	98	...	...	...	98	
Total ...	1,204	5,240	29·5	1,040	7,350	13,630	

The classification of roads and fire lines in this circle leaves something to be desired. The forests are intersected with straight roads, generally of 15 feet width, which are used for fire conservancy purposes as well as for export, and a proportion of the expenses incurred in their maintenance should certainly be charged to either head if we wish to ascertain the true expenditure on the different operations. As noted under the head of fire protection, it is now proposed to break up the large blocks of closed forest by a system of 100 feet and 50 feet clear cut fire lines. When this is accomplished, the 15 feet wide roads will have no appreciable influence on fire conservancy, and only those roads need be repaired which are actually required for inspection or for the export of the year. Considerable saving under this head can thus be effected. Under existing roads in the above table the total length of roads in the Divisions is entered.

(b)—*Buildings.*

40. The following statement gives details of work on buildings during the year :—

Division.	Repairs to existing buildings.	Expenditure on new buildings.	Remarks.
	Rs.	Rs.	
Pilibhít	433	91	The expenditure during 1890-91 amounted to Rs. 13,932.
Bhira	501	...	
Kheri	891	1,044	
Bahraich	728	690	
Gonda	1,190	1,996	
Gorakhpur	1,066	3,459	
Bahramghát*	414	...	
Total ...	4,881	8,222	

The style of rest-house in the Pilibhit and Bhira Divisions is very inferior; it may be said that there is only in each of these forests one building which is substantial enough to afford protection against the climate, the others being mere shanties which are much in want of repair, and which were originally run up in such a rough style that it hardly pays to keep them in order.

In Kheri the system of rest-houses devised by Captain Wood is now almost complete.

In Bahraich the same can be said.

In Gonda and Gorakhpur there is still some work to complete the chain of rest-houses, and the expenditure in these Divisions is, therefore large.

41. Too little attention has been paid in the circle to providing quarters for the subordinate staff, and it is essential that the headquarters of beats should be furnished with suitable buildings for the shelter of the protective staff. Much can be done by arranging that these headquarters should be at the nearest rest-house and allotting a portion of the outhouses to the protective staff, and in this way much unnecessary expenditure on chaukidárs can be obviated. But where there are no rest-houses in the vicinity, suitable accommodation for the establishment must be provided.

42. In terms of paragraph 17, Resolution No. 782F., dated 24th October 1891, the following information is given :—

Division.	Rest-house for controlling staff.		Quarters for subordinate, (including revenue depôts).		Offices, stores, revenue depôts, &c.		Wells.		Total.		Remarks.
	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	
Direction	...	...	...	...	...	...	...	...	...	...	Many of the so-called rest-houses are quite unsuitable, except as affording temporary shelter during the more temperate season of the year.
Pilibhít	8	8	14	13	5	5	24	24	51	50	
Bhira	7	7	6	6	4	4	23	23	40	40	
Kheri	12	12	...	...	21	21	44	44	77	77	
Bahramghát ...	1	1	2	2	13	14	3	3	19	20	
Bahraich	14	14	15	15	5	5	26	26	60	60	
Gonda	6	5	10	8	12	11	4	4	32	28	
Gorakhpur ...	12	10	5	5	16	10	12	11	45	42	
Total for Circle ...	60	57	52	49	76	76	136	135	324	317	

(c)—*Other Works.*

43. The other works carried out are shown by Divisions below :—

In Bhira Rs. 80 was expended in repairs and cleaning existing wells.

In Pilibhit Rs. 46 on the same.

In Kheri Rs. 511 was spent on the construction of two new wells, and Rs. 101 on maintenance of 32 existing wells.

In Bahraich Rs. 189 completed the construction of a well at Ghumna chauk; and a further sum of Rs. 150 was expended in repair of bridges, which should not have been charged to this head of expenditure.

In Gonda only Rs. 71 was spent on maintenance.

In Gorakhpur one well was completed at a cost of Rs. 204. Other expenditure under this head was due to the construction of an inspection boat for the drift operations on the river Gandak.

CHAPTER IV.

OUTTURN AND WORKING.

44. The outturn of the circle in timber and fuel compares with last year's as under :—

	1891-92.	1890-91.
Timber, green	1,986,916	1,944,067
„ dry	224,183	386,385
Fuel, green...	1,506,556	2,382,300
„ dry	1,218,873	
Total ...	4,936,530	4,712,752

from which it will be seen that there was a decrease in dry timber of 162,202 cubic feet, an increase in green timber of 42,849 cubic feet, and an increase in fuel of 343,131 cubic feet, resulting in a total increase of 223,778 cubic feet. Although there was a

very large decrease in the yield of green timber from Kheri, this was more than made good by extended green timber operations in other Divisions, and the falling off in timber must, therefore, chiefly be attributed to less extraction of dry timber. This is not a matter for regret; continued protection must result in diminishing the supply of dry timber, and an increase in yield of dead trees must be due either to an abnormal season or to fraud amongst the extractors. The increase in fuel is due to operations in Bhira, Bahraich, and Gorakhpur, to large demands by grantees, and also to two years' outturn to right-holders being credited by Pilibhít, the correct figures for the year not having been entered in the last annual report.

45. The outturn in minor forest produce is represented by a sum of Rs. 1,07,931, and compares with that of last year as under :—

	1890-91.	1891-92.
Removed by Government agency	28,042	28,282
" purchasers	57,523	64,088
Estimated removals by grantees and right-holders ...	12,852	15,561

There was thus an increase of Rs. 12,805 on sales and of Rs. 2,709 on free grants. The former is attributable to increase in export of baib grass in Bahraich, and to commencement of catechu-making and more extraction of thatching grass in Gorakhpur.

The realization of grazing dues amounted to Rs. 52,726, being some Rs. 2,421 in excess of last year's collections, an increase referable to payments of outstandings of previous years, whilst free grazing to the estimated amount of Rs. 4,287 was also given.

46. The following statement is the summary of the main facts of the outturn and working of the year :—

No.	Particulars.		1891-92.	1890-91.	Increase.	Decrease.
1	Green trees felled	No.	...	...	...	...
2	Outturn in timber and fuel, green	c. ft.	3,403,474	...	...	...
3	" of timber, including timber from dry trees.	"	2,211,099	2,330,452	...	119,353
4	Value of above	Rs.	3,59,506	6,53,430	...	2,93,924
5	Outturn of green timber	c. ft.	1,986,916	1,944,067	42,849	...
6	Value of above	Rs.	3,22,601	4,54,955	...	1,32,354
7	Outturn of dry timber...	c. ft.	224,183	386,385	...	162,202
8	Value of above	Rs.	36,905	1,98,475	...	1,61,570
9	Outturn of green timber removed by departmental agency.	c. ft.	254,259	750,405	...	496,146
10	Value of above	Rs.	1,24,624	3,11,487	...	1,86,863
11	Outturn of green timber removed by exporters...	c. ft.	472,224	220,865	251,359	...
12	Value of above	Rs.	1,14,090	86,665	27,425	...
13	Outturn of green timber removed by free grantees and right-holders.	c. ft.	1,260,433	972,797	287,636	...
14	Value of above	Rs.	83,887	56,803	27,084	...
15	Outturn of dry timber removed by exporters ...	c. ft.	166,301	263,779	...	97,478
16	Value of above	Rs.	80,603	1,61,587	...	1,80,984
17	Outturn of dry timber removed by free grantees and right-holders.	c. ft.	57,882	162,606	...	64,724
18	Value of above	Rs.	6,302	36,888	...	30,856
19	Outturn of firewood and charcoal	c. ft.	2,725,431	2,382,300	343,131	...
20	Value of above	Rs.	82,144	78,009	4,135	...
21	Outturn of fuel and charcoal removed by departmental agency.	c. ft.	1,400,675	1,451,952	...	51,277
22	Value of above	Rs.	62,759	68,104	...	5,345
23	Outturn of fuel and charcoal removed by exporters.	c. ft.	858,139	561,137	297,002	...
24	Value of above	Rs.	11,114	6,858	4,256	...
25	Outturn of fuel and charcoal removed by free grantees and right-holders.	c. ft.	466,617	369,211	97,406	...
26	Value of above	Rs.	8,271	3,047	5,224	...
27	Timber sold by departmental agency ...	c. ft.	322,649	223,496	99,153	...
28	Value of above	Rs.	2,07,420	1,83,545	83,875	...
29	Timber sold direct to purchasers	c. ft.	604,517	484,684	119,833	...
30	Value of above	Rs.	1,41,950	1,17,867	24,083	...
31	Fuel sold by departmental agency ...	c ft.	1,240,722	1,097,531	143,191	...
32	Value of above	Rs.	59,353	64,946	...	5,593.
33	Fuel sold to purchasers	c. ft.	858,139	561,137	297,002	...
34	Value of above	Rs.	11,223	6,773	4,450	...
35	Bamboos	scores.	5,057	2,671	2,386	...
36	Value of above	Rs.	646	250	396	...
37	Minor produce and grazing	"	1,45,090	1,07,457	37,639	...
38	Value of other receipts	"	13,439	10,812	2,601	...
39	Outturn per square mile in cubic feet of timber and fuel.	c. ft.	3,974	3,798	176	...
40	Value of above per square mile	Rs.	355	588	...	233
41	Gross receipts " " "	"	611	5,717	34	...
42	Net. " " " "	"	288	2,469	39	...

The number of green trees felled cannot be supplied for the circle, as no record is available for trees felled by right-holders in Pilibhit and in improvement fellings in Bhira and Gorakhpur, nor can comparative statistics of green fuel be given, as these were not entered in last year's report. It is satisfactory to note an increase of produce exported by purchasers. The delivery of fuel departmentally must, however, still continue as the rates offered by consumers are not sufficiently high to attract contractors; but the disposal of the outturn of timber and other produce does not present this difficulty, and good progress has been made during the year both in Kheri and Bahraich in extending the system of direct sales.

47. **Pilibhit**, with a total outturn in timber and fuel of 553,339 cubic feet, shows an increase of 190,035 cubic feet, but more than this increase is due to removals by right-holders, removals by Government agency and purchasers showing a falling off of about 30 per cent. Under minor forest produce there is an increase of Rs. 820 in sales: but, on the other hand, right-holders removed Rs. 2,000 worth of produce more than in last year. The increase in free removals is due, as above stated, to incomplete statistics in 1890-91. The improvement in sales of minor forest produce occurs under grass and is due to successful leasing. There were practically no fellings during the year, except on fire lines, the fuel contract to supply the railway 64,000 cubic feet annually having been broken off. Under grazing Rs. 760 is credited, of which Rs. 250 is on account of outstandings, whilst free grazing is valued at Rs. 3,505. There appears to be a steady decrease in the number of cattle grazed in pargana Pilibhit.

Bhira, with a total timber and fuel outturn of 377,126 cubic feet, shows an increase of 80,532 cubic feet, attributable to increased fuel operations; but these operations will require to be very considerably extended if the railway contracts are to be complied with. Green fuel outturn amounted to 143,010 cubic feet, which was removed by departmental agency against a contract of 640,000 cubic feet, of which only 153,778 cubic feet (up to May 1892) have been delivered, and a further contract of 200,000 cubic feet due on 31st March 1893, against which no deliveries have been made. Improvement fellings at Gola and Mailani and the clearing of 100 feet and 50 feet fire lines yielded the timber and fuel of the year; but much difficulty was experienced in obtaining labour owing to the high rates paid on the railway works.

Minor forest produce shows, with a total of only Rs. 8,329, a falling off of Rs. 5,484, due to less sale of baib and catechu and to delay in crediting the value of the crop of the year. Grazing shows an increase of about Rs. 807, due to more cattle grazing at full rates.

Kheri shows a total outturn of 616,661 cubic feet in timber and fuel, a decrease of 461,374 cubic feet, of which nearly all is referable to green timber, there having been no sleeper works during the year. Other items show no important variations. Minor forest produce yielded Rs. 10,057 worth of material against Rs. 11,743 of last year; the decrease is due to less manufacture of catechu, whilst under grazing there is an increase of Rs. 2,731, owing to outstandings of last year, the total for the year being Rs. 11,525. The value of free grazing was Rs. 752.

Bahraich gives a fuel and timber outturn of 1,644,912, an increase of 523,602 cubic feet on last year's figures, about one half of this increase being referable to timber and the remainder to fuel. Improvement fellings and weeding operations were most energetically carried out by the Divisional Officer; 313,000 cubic feet of fuel were removed by departmental agency, and whilst the felling of sál was below the average, 136,000 cubic feet of asaina was weeded out to the advantage of the former species. It is satisfactory to note that direct sales are on the increase, and that Mr. Rebsch is succeeding in inaugurating the system of selling standing trees, thus disposing of the whole material of improvement fellings on the spot. The example set in Bahraich is one to be followed in other Divisions of the circle, the staff employed in these operations having been trained entirely by the Divisional Officer, whose felling registers are excellently kept up. The value of the yield of minor forest produce was Rs. 28,233,

of which Rs. 16,722 was exported departmentally in the shape of baib grass for paper-making. Of this Mr. Rebsch collected 17,000 maunds and disposed of 11,000 maunds during the year; and it is hoped that next season purchasers will themselves arrange for cutting and removal of the crop. There is an increase of nearly Rs. 10,400 in the value of minor forest produce over the yield of last year. Grazing dues with a total of Rs. 20,940 shows an increased collection of Rs. 1,530. Altogether the outturn and working of the Division is most satisfactory in every way.

Gonda, with a timber and fuel yield of 912,333 cubic feet, shows a falling off of 116,529 cubic feet, occurring chiefly in fuel, although improvement fellings over 1,100 acres were made and the fuel removed by departmental agency amounted to 459,730 cubic feet. The yield of green timber increased, whilst that of dry timber diminished. In minor forest produce the outturn sold for Rs. 15,532 as against Rs. 14,252 of last year, the increase being due to extended sales of lime and catechu. An increase in export of baib grass will probably take place so soon as arrangements can be made for baling in the forest; at present the long lead to the railway is nearly prohibitive to the carriage of loose grass. About 4,000 maunds were collected at the close of the season. Grazing shows collections of Rs. 5,802, a falling off of about Rs. 856 on last year, due solely to non-realization before the 31st March. The outturn of the year is very satisfactory, and the working shows much energy and good management on the part of the Divisional Officer.

Gorakhpur gives an outturn of 832,159 cubic feet of timber and fuel, an increase of 7,512 cubic feet over last year's yield. Although 427,432 cubic feet of fuel was removed by departmental agency, there is a falling off of 125,728 cubic feet under this head owing to restriction of improvement felling operations during the year. There is, however, an increase of nearly 2 lakhs cubic feet in fuel sold direct to purchasers, a most satisfactory occurrence. There is a good sale for fuel locally in the district. Minor forest produce was disposed of to the amount of Rs. 26,976 against an outturn of the value of Rs. 19,416 of the previous year. The increase is due to catechu manufacture having been commenced, which industry brought in a revenue of Rs. 6,838, and to improved sales of grass. The value of grazing dues collected amounted to Rs. 10,389 against Rs. 12,140 of the previous year. This falling off is due to the attempt to impose a uniform yearly rate for all cattle irrespective of the period for which they grazed; but subsequently this was again altered for quarterly, halfyearly, and yearly rates. The outturn and working of the Division has been satisfactory, but the small area worked over in improvement fellings on account of the difficulty in obtaining labour will probably result in curtailing the outturn in timber and fuel for next year.

Bahramghat.—2,289 logs were landed at the depôt, and the outturn of the year is shown in the following statement:—

Year.	Indents in cubic feet.							Remarks.
	Balance of last year.	Received during year.	Total.	Complied with.	Cancelled.	Total.	Balance at close of year.	
1890-91 ...	15,210	45,484	60,694	40,151	6,605	46,756	13,938	
1891-92 ...	13,938	34,103	48,041	31,887	2,605	34,492	13,549	

There was a decrease of 55,425 cubic feet in timber sold, the outturn for the year being 92,879 cubic feet; but there were sales of fuel amounting to 13,819 maunds, which did not take place last year. The usual auction sales took place, at which inferior produce was disposed of at from 8 annas to Re. 1 per cubic foot. The cost of sawing amounted to annas 2·68 per cubic foot against 2·08 of the previous year, the increase being due to excess expenditure on renewals and repairs; the machinery was not in good order.

48. The classification of green timber and fuel fellings and the agency employed in the removal of the produce is noted below in the two following statements :—

I.—Description of fellings in outturn of green timber and fuel.

Fellings.	Cubic feet.	Remarks.
Regeneration (selection)	175,012	It was found impossible owing to variations in classification to compare these figures with those of last year with sufficient accuracy to serve any useful purpose.
Strip fellings	465,488	
Improvement fellings	821,023	
" thinnings	344,986	
Total ...	1,807,709	
Unclassed fellings (clearances on roads, &c., and fellings by grantees and right-holders)	1,685,765	
Grand Total ...	3,493,474	

II.—Agency employed in removal of green timber and fuel.

Agency.	Cubic feet.	Remarks.
Government.		As above.
Regeneration (selection)	72,641	
Strip fellings	465,488	
Improvement fellings	630,795	
" thinnings	332,854	
Unclassed fellings	119,416	
Total ...	1,621,194	
Purchasers.		
Regeneration (selection)	102,971	
Strip fellings	...	
Improvement fellings	147,965	
" thinnings	12,132	
Unclassed fellings	348,859	
Total ...	611,927	
Right-holders and grantees		
Improvement fellings	42,863	
Unclassed fellings	1,217,490	
Total ...	1,260,353	
Grand Total ...	3,493,474	

Selection fellings took place in Kheri, Bahraich, and Gonda : strip fellings in Bhira and Gonda : improvement fellings in Kheri, Pilibhít, Bhira, Gonda, and Gorakhpur : improvement thinnings in Bahraich and Gorakhpur : whilst unclassed fellings took place in each forest Division.

49. The outturn of timber obtained by drift operations of the year was considerably less than that of the previous year, owing, it is thought, to the closing of the Nepal forests and consequently to less traffic in the main rivers. The salvage of the year may be detailed as below :—

	In hand on 1st April 1891.	Collected during the year.	Returned to claimants.	Sold and used by the Department.
	C. ft.	C. ft.	C. ft.	C. ft.
Great Gandak...	3,350	29,773	204	30,517
Rapti	2,675	18,087	1,189	17,662
Bahramghát	6,108	32,064	...	21,898
Total ...	12,133	79,924	1,393	70,077

giving a balance of 19,669 cubic feet in hand at close of the year.

The working of drift operations in the Province has now been entrusted to the Divisional Forest Officers, Bahramghát being merely a checking station, and it is hoped that with better supervision the revenue will increase, and with revision of the rules any friction between the Department and the tenantry will cease.

50. The estimated free grants of the year were as under :—

		1890-91.	1891-92.	Difference.
Timber and fuel	C. ft.	1,464,574	1,784,932	+320,358
Value	Rs.	68,075	98,481	+30,406
Minor forest produce and grazing	"	16,769	19,849	+3,080

The excess, as already explained, is due chiefly to short booking in Pilibhít in 1890-91, but there was also a brisk demand for fuel on the part of grantees and right-holders.

CHAPTER V.

FINANCIAL RESULTS.

51. The statement below shows the financial results of the last six years as compared with those of the year under review :—

Year.	Square miles.	Gross revenue.	Expenditure.			Net surplus.	Revenue and expenditure per square mile.					Percentage of gross revenue and expenditure.		
			Conservancy and works.	Establishment.	Total.		Gross revenue.	Conservancy and works.	Establishment.	Total.	Surplus.	Conservancy and works.	Establishment.	Total.
		Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.			
Average of years from 1885-86 to 1890-91 ..	1,228	617,005	285,370	105,370	390,746	227,150	503	232	86	318	185	46	17	63
1890-91 ..	1,229	708,967	291,643	111,073	402,716	306,251	577	237	90	327	249	41	15	56
1891-92 ..	1,242	758,907	294,377	106,760	401,137	357,530	611	237	85	322	288	38	14	52

In this statement the figures giving the total area of the circle in the six years period have been adjusted so as to admit of comparison. Of the 38 miles increase shown in form 49 only 13 miles are actual; the remainder nominal and due to revision of area statements.

The gross revenue is higher than the average of the past six years and the net surplus the highest on record by Rs. 51,600. The percentage of expenditure to revenue is lower by 11 per cent. than that of the past six years. The expenditure on conservancy and works is about Rs. 2,700 more, and on establishment about Rs. 4,300 less, than in the previous year. The results may therefore be considered financially to be most excellent.

52. The following statement will show how the Divisions of the circle contributed to the revenue and expenditure of the year :—

Divisions.	Receipts.		Charges.		Surplus.		Deficit.		Percentage of charges on receipts.		Difference.		
	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	Receipts.	Charges.	Net result.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
Direction ...	...	142	22,345	22,026	...	...	22,345	22,484	...	...	−142	−281	+139
Pilibhít ...	9,855	8,153	14,820	26,034	...	...	4,965	17,881	150	319	+1,702	−11,214	+12,916
Bhira ...	23,062	26,090	20,371	16,093	2,692	10,596	...	...	88	60	−3,028	+4,278	−7,906
Kheri ...	2,83,372	1,56,452	1,84,034	1,65,717	99,337	...	...	9,265	65	106	+1,26,921	+18,318	+1,08,603
Bahramghát	1,06,430	1,74,561	34,038	25,774	72,392	1,48,787	...	...	32	14	−68,131	+8,264	−76,395
Bahraich ...	1,85,714	1,51,169	49,122	46,804	1,36,592	1,04,365	...	...	26	30	+34,545	+2,318	+32,227
Gonda ...	58,936	49,422	30,734	31,101	28,202	18,321	...	...	52	63	+9,514	−367	+9,881
Gorakhpur ...	91,598	1,42,379	45,673	68,508	45,925	73,811	...	...	49	48	−50,781	−22,895	−27,886
Total ...	7,58,967	7,08,967	4,01,137	4,02,716	3,57,830	3,06,251	27,310	40,630	53	57	+50,000	−1,579	+51,579

53. **Pilibhit** and **Bhira.**—Separate figures for the two charges are entered above, but as part pay and allowances of Divisional Officer have this year been charged to Bhira, it will be more convenient to consider the results of the financial working of both forests together. In the year under review there was over the whole charge a deficit of Rs. 2,274, revenue amounting to Rs. 32,917 and expenditure to Rs. 35,191, against a deficit of Rs. 7,284 in 1890-91; for, though the revenue was Rs. 2,000 less, the expenditure also diminished by Rs. 7,000. Under revenue there is a decrease in Bhira of Rs. 3,700, and an increase of Rs. 1,700 in Pilibhít. The former is due entirely to less departmental sales, revenue from purchasers showing a decided increase; while in Pilibhít the receipts under both these heads show an improvement. The less expenditure of Rs. 7,000 is explained by savings of Rs. 1,150 in Bhira and Rs. 150 in Pilibhít under conservancy and works, whilst there is an excess of Rs. 5,420 under establishment in Bhira and a saving of Rs. 11,060 under that head in Pilibhít. The cause of this decrease is owing to Mr. Ponsonby's furlough allowance having been charged in the previous year under this head.

Kheri shows an increase of gross revenue of Rs. 1,27,000, and of expenditure of Rs. 18,000, which converts the deficit of 1890-91 into a surplus of Rs. 99,000. The increase in revenue is almost entirely due to large sale of timber stock, though the revenue received from direct purchasers also shows a decided increase. Of the increase in expenditure Rs. 5,000 is due to carting expenses in 1890-91 being charged to the accounts of the year; Rs. 2,000 to purchase and keep of an elephant; Rs. 5,000 to construction of boats; Rs. 3,000 to extended fire conservancy operations and expenses connected with working plans; and the remainder to miscellaneous items. The charges under establishment show only a slight increase, due to the appointment of an Extra Assistant Conservator to the Division.

Bahramghat shows a decrease in revenue of some Rs. 68,000, and an increase in charges of Rs. 8,000. The cause of the deficiency in revenue is due to receipt of fewer indents and to a falling off in drift sales; whilst the increase in expenditure is due to Rs. 4,000 expended on fuel operations, Rs. 1,500 excess on drift management, and over Rs. 2,000 excess on refunds and law charges brought about by injudicious action in reference to drift sales. There is also a slight increase under establishment due to promotion of Divisional Officer.

Bahraich gives an increase in revenue compared with last year of Rs. 34,500, with an increase in expenditure of only Rs. 2,300. The gross revenue of Rs. 1,85,714 and the net surplus of Rs. 1,36,592 are the highest on record, although both have been steadily on the increase for the last six years. Of the increased revenue about Rs. 7,000 is due to departmental operations and the remainder to direct and improved sales of timber, grass, and minor forest produce; whilst increased expenditure is referable to extra expenditure of Rs. 1,300 under departmental works, of Rs. 1,400 under direct sales, with a saving of Rs. 400 under conservancy and improvement. The percentage of expenditure under improvement and formation to revenue is absurdly low, standing, as it does, at only 3 per cent., whilst the percentage of total expenditure to revenue is only 26, showing clearly that we would be justified in expending considerable sums on works of which permanent demarcation, surveying, and better communications are the most important.

Gonda with a total revenue of Rs. 58,936 and an expenditure of Rs. 30,734, shows an increase of revenue of Rs. 9,500 and a less expenditure of Rs. 867. The gross and net revenue is the highest on record. The whole of the increase in revenue is due to extended departmental operations in large deliveries of fuel and sleepers, direct sales showing a falling off owing to less demand and delay in collection. There is a saving of Rs. 1,391 under conservancy and works, and an excess of Rs. 1,004 under establishment; the former is distributed over almost every head, whilst the latter is due to the promotion of the Divisional Officer. The expenditure on formation and improvement amounts to nearly 10·5 per cent. of the total.

Gorakhpur shows a falling off in revenue of Rs. 50,781 and an expenditure of Rs. 22,895; the former is due to less departmental operations and to a falling off in drift sales, whilst direct sales show some increase. Under expenditure there is a saving in conservancy and works under every head, the two principal items being Rs. 15,000 under departmental works and Rs. 6,000 under improvement of forests. If it were necessary to curtail the improvement fellings, yet it appears a matter of regret that more was not spent on buildings, roads, and plantations.

54. The financial results of the drift operations of the year are given below :—

Year.	Great Gandak.		Rapti.		Bahramghát.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1890-91 ...	9,986	5,754	6,895	3,122	11,094	1,808
1891-92 ...	6,964	5,727	4,412	2,089	10,650	3,313
Difference ...	3,022	27	2,483	1,033	1,044	1,505

The net surplus in these operations amounted therefore to Rs. 10,897 against Rs. 17,891 of the preceding year. The falling off is due to less traffic in the main streams. The increase in expenditure occurring in Bahramghát is attributable to an increase in establishment and in salvage expenses.

55. It will be seen from the above details that the financial importance of the Divisions of the circle is as follows: (1) Kheri with Bahramghát, (2) Bahraich, (3) Gorakhpur, (4) Gonda, (5) Bhira with Pilibhít; and it is probable that Bahraich, with its excellent sales of improvement fellings and of minor forest produce, will take the first rank in the circle as soon as the new line of railway is constructed to Sajauli; unless Kheri, with the special advantages in carriage it now possesses and a restriction of departmental works, shows, as it should do, a decided improvement in the future.

56. A comparative statement of receipts and charges by main heads is given below, and also tables showing the same by budget heads :—

	Receipts.					Charges.				
	Amount.		Difference in 1891-92.		Budget heads.	Amount.		Difference in 1891-92.		Budget heads.
	1891-92.	1890-91.	Increase.	Decrease.		1891-92.	1890-91.	Increase.	Decrease.	
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
I.—Departmental operations ...	4,51,931	4,32,805	19,126	...	I	2,30,951	2,34,255	5,696	...	Debits various to suit each division (vide Form No. 52)
II.—Other heads of revenue ...	3,07,036	2,76,162	30,874	...	II to V	77,561	96,412	...	18,851	
III.—Formation, protection, and improvement of forests ...	...	...	...	...		83,625	72,049	11,576	...	
Total ...	7,58,967	7,08,967	50,000	...	...	4,01,187	4,02,716	..	1,579	

RECEIPTS.

Year.	I. Timber and other produce removed from the forests by Government agency.	II. Timber and other produce removed from the forests by purchasers.	III. Confiscated drift and waif timber.	IV. Revenue from forests not managed by Government.	V. Miscellaneous receipts.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1891-92	4,51,931	2,76,759	16,839	...	13,439	7,58,967
1890-91	4,32,805	2,37,103	26,892	1,855	10,312	7,08,967
Difference More ...	19,126	39,656	...	...	3,127	50,000
Difference Less ...	...	...	10,053	1,855	...	...

EXPENDITURE.

A.—Conservancy and Works.

Year.	I. Timber and other produce removed from forests by Government agency.	II. Timber and other produce removed from forests by consumers or purchasers.	III. Confiscated drift and waif wood.	IV. Revenue from forests not managed by Government.	V. Rent of leased forests and payments to shareholders	VI. Live stock, stores, tools and plant.	VII. Communications and buildings.	VIII. Demarcations, improvement, and extension of forests.	IX. Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1891-92	2,66,078	11,027	8,292	...	...	8,710	17,957	22,061	10,252	2,94,377
1890-91	2,11,116	10,105	7,887	...	...	8,872	26,804	23,979	2,880	2,91,643
Difference More ...	...	922	405	...	...	...	...	...	7,372	2,734
Difference Less ...	5,038	...	...	...	...	162	8,847	1,918	...	...

B.—Establishment.

Year.		I. Salaries.	II. Travelling allowances.	III. Contingencies.	Total.
		Rs.	Rs.	Rs.	Rs.
1891-92...	... ...	85,661	13,944	7,154	1,06,760
1890-91...	... ...	91,160	14,135	5,778	1,11,073
Difference	More ...	...	...	1,376	...
	Less ...	5,499	191	...	4,313

It will be seen from the above statements that four-fifths of the total increase in revenue is due to increased sales to purchasers, although considerably more than one-half of the gross revenue is obtained by departmental working. The slight variations under expenditure do not call for special remark.

57. The following table gives the difference in value of timber, produce, stock in hand, and outstandings at the commencement and close of the year:—

I.

Value of stock—	Rs.
On 1st April 1891	10,19,396
On 31st March 1892	... 9,07,357
Balance against the year	... 1,12,039

II.

Value of outstandings—	By contractors. Rs.	On account of revenue. Rs.
On 1st April 1891	72,526	13,345
On 31st March 1892	65,882	36,524
Balance for or against the year ...	−6,644	+23,179

The value of the transactions of the year is as below:—

	1890-91. Rs.	1891-92. Rs.
Cash surplus	+3,06,351	+3,57,830
Decrease / Increase Value of stock	+3,25,606	−1,12,039
Outstandings due	+85,871	+1,02,406
Total ...	7,17,828	3,48,197

CHAPTER VI.

GENERAL.

58. During the year the Inspector-General of Forests inspected the forests of Kheri and Pilibhít chiefly in reference to the compilation of the working plan for the former forests.

59. All Divisional offices were inspected during the year. Speaking generally, the clerical staff of the circle is numerically strong enough to carry on the routine work of the offices; but the clerks are much underpaid, so that it is difficult to obtain suitable men on the salaries offered, whilst present incumbents of long service grow disheartened and careless. The press of clerical work in the Oudh Circle is referable to large departmental operations, to the want of method and punctuality in office work, and to the inadequate staff of Range Officers. The clumsy system of export by Government agency will, no doubt, gradually give way to the more suitable system of direct sales; uniformity and punctuality in office work will improve as the upkeep of prescribed registers is insisted on, and the expected reorganization of the Provincial

service will result in increasing the number of trained rangers in the circle: but the improvement of the position of the office establishment is a matter requiring urgent attention, and this must form the subject of a separate communication to Government.

60. The construction of a railway from Mailani to Dudua was commenced during the winter, and it is hoped that the line will be open for goods traffic next season. The result of these improved communications will be to open out the forests of the Kheri Division to direct export by the merchants of these Provinces and of the Panjáb; to render possible the utilization of the vast supplies of inferior timber and of fuel which up to the present it did not pay to remove, and gradually to do away with the large departmental operations, which, including, as they did, carriage by land and water all over Northern India, could not be adequately supervised by the Divisional Officer, even at the expense of neglect of his legitimate work.

It is satisfactory to learn that an extension of the Bengal and North-West Railway from Nanpara to Sujauli is in contemplation, which, passing through the heart of the most valuable sál forests in Bahraich, will ultimately link in with the Rohilkhand and Kumaun Railway. When this system of railways is complete the most potent argument in favour of stricter conservancy will be to hand, as forest produce hitherto unutilized will become of value, thereby considerably affecting the revenue of the State forests.

61. Several important administrative matters were settled during the year or were under consideration at its close. Amongst these may be mentioned the amalgamation under one officer of the forests in the Kheri district, a step rendered advisable as improved communications had created one common export line and market both for the trans- and cis-Sarda forests: the proposed exchanges of land, with a view to rectification of the boundary, in Kheri and Gonda: the introduction of the indent system for the supply of free produce in the forests open to rights in Puranpur; the closing to fire of the Kanjuria sál forest in Kheri; the modification of rules made under section 45 of the Indian Forests Act; and the issue of rules under section 51 of that Act.

62. The thanks of the Department are due to Commissioners of Divisions and District Officers for the interest taken in the forests and for the help afforded to their District Forest Officers, which has so materially affected for good the results of the year's working, more especially as regards the protection of the reserves.

S. EARDLEY-WILMOT,
Conservator of Forests,
N.-W. P. and Oudh,
Oudh Circle.

NAINI TAL:
The 7th July 1892.

ANNUAL STATEMENTS

AND

APPENDICES.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF RESERVED AND UNCLASSED STATE FORESTS, 1891-92.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891. Acres.	Area on 1st April 1891. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1892. Acres.	Area on 1st March 1892. Equivalent in square miles.	Number and date of Notification of addition or transfer.	Remarks.
			Reserved forests.								
Pilibhít ...	Pilibhít ...	Pilibhít ...	Pilibhít ...	96,904	151	...	*552	96,352	150	No. 442F./434A-2 of 23rd May 1892.	* 55 acres transferred for railway feeder road. 29 acres transferred to Public Works Department for construction of a road from Puranpur to Dhanoraghat.
	Minakote ...		Minakote ..								
	Dhanaraghát ...		Dhanaraghát								
Bhira ...	Kishanpur ...	Kheri ...	Kishanpur ...	96,454	151	...	...	96,454	151	No. 77F./367-5 of 30th January 1892.	
	Mailani ...		Mailani ...								
	Gola ...		Gola ..								
Kheri ...	Newalkhár ...	Do. ...	Newalkhár ...	168,296	263	†13,696	...	181,992	284		One-third of mauza Baibaha having been included in the reserved area by error in previous returns.
	Khairigarh ...		Khairigarh ..								
	Motipur ...		Motipur ...								
Bahraich ...	Chakia Charda	Bahraich ...	Chakia Charda	209,155	327	...	...	209,155	327		† By correction of areas.
	Bhinga ...		Bhinga ...								
	Nawábganj ...		Nawábganj ...								
Gonda ...	Barhawa ...	Gonda ...	Barhawa ...	99,079	155	...	...	99,079	155		
	Tulsipur ...		Tulsipur ...								
	Bhambhar		Bhambhar ...								
Gorakhpur ...	Northern ...	Gorakhpur ...	Northern ...	100,428	157	‡8,510	...	108,938	170	No 321F./981-6 of 24th April 1891.	‡ Acres 3,080 increase on account of corrected figures taken from recent settlement records. Acres 5,430 transferred from charge of district authorities.
	Southern ...		Southern ...								
			Total ...	770,316	1,204	22,206	552	791,970	1,237		
			Unclassed State forests.								
Pilibhít ...	...	Pilibhít ...	One-third of mauza Baibaha.	...	...	468	...	§468	1	...	§ Correction of previous returns. Error discovered in register of reserved forests.
Bahraich ...	Mótipur ...	Bahraich ...	Motipur ...	...	...	2,421	...	‖2,421	4	...	‖ Four Government villages transferred to Forest Department by G.O. No. 215F./14A.-12 of 31st March 1890.
			Total ...	...	..	2,889	...	2,889	5		§ & ‖ Arrangements are being made for gazetting them as reserved forests.
			GRAND TOTAL ..	770,316	1,204	25,095	552	794,859	1,242		

Abstract of changes during the year.

Reserved Forests—				
Area at commencement of the year				770,316
ADDED—By correction of areas	16,776	22,206		
By transfer from charge of district authorities	5,430			
EXCLUDED—By correction of previous returns ...	468	552		
By transfer	84			
Net increase				21,654
Area at close of the year				791,970

Abstract of changes during the year.

Unclassed State Forests—	
Area at commencement of year	*Nil.*
ADDED—	
Correction of previous returns 468	
Placed under the control of Forest Department 2,421	
Total ... 2,889	
EXCLUDED	*Nil.*

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 50.

REGISTER OF BREACHES OF FOREST RULES DURING 1891-92.

Forest Division.		Cases pending from 1890-91.	New cases of the year.					Total cases	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Pilibhít	A ...	...	2	...	...	...	2	2	1	1	...	...	1	1	1
	B ...	...	...	6	1	...	7	7	6	11	...	...	6	11	1
Total	...	...	2	6	1	...	9	9	7	12	...	...	7	12	2
Bhira	A ...	...	1	...	1	...	2	2	1	2	1	2	2	4	...
	B ...	...	...	5	5	...	10	10	8	18	2	3	10	21	...
Total	...	...	1	5	6	...	12	12	9	20	3	5	12	25	...
Kheri	A ...	...	...	2	...	1	3	3	1	9	2	5	3	14	...
	B ...	...	...	7	4	3	14	14	13	30	1	4	14	34	...
Total	...	...	...	9	4	4	17	17	14	39	3	9	17	48	..
Bahráimghát ...	A ...	...	...	3	...	3	6	6	1	1	4	10	5	11	1
	B ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	3	...	3	6	6	1	1	4	10	5	11	1
Bahraich	A ...	...	...	18	26	2	46	46	41	89	5	32	46	121	...
	B ...	...	...	7	...	1	8	8	7	25	1	2	8	27	...
Total	...	...	...	25	26	3	54	54	48	114	6	34	54	148	...
Gonda	A ...	...	2	1	9	...	12	12	11	21	1	2	12	23	...
	B ...	...	6	25	18	6	55	55	55	95	...	...	55	95	...
Total	...	...	8	26	27	6	67	67	66	116	1	2	67	118	...
Gorakhpur ...	A ...	...	...	3	...	3	6	6	5	11	1	1	6	12	...
	B ...	...	3	22	...	...	25	25	25	42	...	...	25	42	...
Total	...	...	3	25	...	3	31	31	30	53	1	1	31	54	...
GRAND TOTAL ...	A ...	...	5	27	36	9	77	77	61	134	14	52	75	186	2
	B ...	...	9	72	28	10	119	119	114	221	4	9	118	230	1

NOTE.—A. Cases taken into Court.
B. Cases compounded.

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1892, TO ACCOMPANY REPORT FOR 1891-92.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
			I.—Area under special protection.					
Pilibhít ...	North Pilibhít	1880	13,594	19,727	8,925	10,802	...	
	East "							
	South-east "							
	Mania kote	1881	14,134	16,717	15,377	1,340	...	
	Dhanaraghát	1886	6,319	6,229	132	6,097	...	
	Total, I ...	...	34,047	42,673*	24,434	18,239	1,334-7-4	* 1,062 acres deducted for roads and lines.
			II.—Area protected from fire by ordinary establishment.					
	West Pilibhít	1892	...	6,617	702	5,915	...	
	South-west "	...	...	2,229	135	2,094	...	
	Total, II ...		.	8,846	837	8,009	...	
	Total of I and II ...	...	34,047	51,519	25,271	26,248	1,334-7-4	
			I.—Area under special protection.					
Bhisa Sub-Division.	Marha	1877	10,796	15,913	...	15,913	...	
	Menziesganj	1885	7,057	7,114	...	7,114	...	
	Ditto	1886	3,560	3,560	...	3,560	...	
	Khareta	1885	3,331	3,671	...	3,671	...	
	Ditto	1890	6,446	7,422	...	7,422	...	
	Kaptanra	1886	...	3,854	...	3,854	...	
	Barauncha	1888	4,035	4,285	35	4,250	...	
		...	...	45,819	35	45,784	...	
		...	. .	*2,539	...	2,539	...	
	Total, I ...	...	35,225	†43,280	35	43,245	...	† 2,539 deducted for roads and lines.

[Form No. 51.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1892, TO ACCOMPANY REPORT FOR 1891-92—(*continued*).

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season.	Remarks
				Area attempted to be protected	Failures.	Actually protected.		
	II.—Area protected from fire by ordinary establishment.							
			Acres.	Acres.	Acres.	Acres.	Rs. a. p.	
Bhira Sub-Division—(*continued*).	Marha	1891	...	1,196	...	1,196	...	
	Meuzieganj	...	...	8,042	960	7,082	...	
	Khareta	...	...	7,614	2,226	5,388	...	
	Kaptaura	...	...	6,879	2,060	4,819	...	
	Baraunsha	...	...	6,418	50	6,368	...	
	Katsia	...	...	1,382	845	537	...	
	Khamaria	...	...	2,502	...	2,502	...	
	Palhanapur	...	...	13,440	2,949	10,491	...	
	Allanganj	...	...	2,112	75	2,037	...	
	Mailani No 2	...	...	1,050	30	1,020	...	
		...	...	50,635	...	41,440	...	
		...	...	196*	...	196	...	*Deducted on account of roads.
	Total II ...	...	...	50,439	9,195	41,244	...	
		...	...	96,454	...	87,224	...	
		...	...	2,735	...	2,735	...	
	Total of I and II ...	...	35,225	93,719	9,230	84,489	3,364-0-0	
	I.—Area under special protection.							
Khesi	Newalkhar Range	1872	28,120	28,120	...	28,120	2,849-5-6	
	" "	1891	...	39,414	...	39,414	2,656-9-3	
	Khairigarh "	1881	43,571	43,571	...	43,571	1,638-14-1	
	" "	1891	...	12,549	...	12,549	983-12-9	
	Total I ...	...	71,691*	123,654	...	123,654	8,128-9-5	* 183 acres difference is due to correction of area.

	Motipur Range.									
	Nishangara (closed) ...	...	...	1878	21,120	21,120	...	21,120	858	Nishangara block.
	" (rest of forest)	...	...	...	5,120	5,120	...	5,120		
	Dharmanpur (closed)	...	...	1885	1,280	1,280	...	1,280	151	Dharmanpur "
	" (open) ...	...	...	...	1,920	1,920	...	1,920		
	Salarpur ...	...	...	...	1,280	1,280	...	1,280		
	Dharmanpur (rest of forests)	...	...	...	4,480	4,480	...	4,480		
	Murtiha (closed) ...	...	...	1885	8,000	8,000	...	8,000	528	Murtiha "
	Bamboo " ...	...	...	1881	640	640	...	640		
	Murtiha (open) ...	...	...	1885	9,280	9,280	...	9,280		
	Babai (closed) ...	...	...	1886	3,840	3,840	...	3,840	67	Babayi "
	" (rest of forests) ...	...	...	...	5,760	5,760	...	5,760		
	Bardia (open forests) ...	...	...	1887	2,240	2,240	...	2,240	36	Bardia "
	Total, Motipur Range		...	...	64,960	64,960	...	64,960	1,640	
	Chakia Charda Range.									
	Chakia (close forests) ...	...	...	1885	5,120	5,120	35	5,120	480	Chakia "
	" (open ") ...	...	...	...	9,600	9,600		9,565		
	Charda (closed tract No. 1)	...	...	...	1,560	1,560	75	2,765	287	Charda "
	" (" " 2)	...	...	...	880	880				
Bahraich ..	" (" " 3)	...	...	...	400	400				
	" (open forests) ...	...	...	...	5,480	5,480	30	5,450	...	
	Total, Chakia Charda Range		...	...	23,040	23,040	140	22,900	776	
	Bhinga Range.									
	Kakar Dari (closed) ...	...	...	1875	22	22	...	22	90	Kakardari block.
	Asnera "	...	...	...	16	16	...	16		
	Shadi Lalganj (compartment 3)	...	...	1884	784	784	...	784		
	Kakar Dari (rest of forests)	...	...	1877	10,058	10,058	...	10,058		
	Bharata Block (compartment 5)	...	...	1884	1,565	1,565	...	1,565	179	Bharatha "
	" (rest of forest)	...	...	1878	13,795	13,795	...	13,795		
	Ponsonbyganj (compartment 8)	...	...	1875	1,560	1,560	...	1,560	530	Ponsonbygonj block.
	" (" 4)	...	...	1878	1,450	1.450	...	1,450		
	" (rest of closed tract)	...	...	1885	5,025	5,025	...	5,025		
	" (open forest)	...	...	...	4,765	4,765	...	4,765		
	Gabhapur (closed) ...	...	...	1886	10,880	10,880	...	10,880	521	Gabhapur block.
	" (open) ...	...	...	...	7,040	7,040	...	7,040		
	Sonpathri (closed) ...	...	...	...	3,200	3,200	...	3,200	250	Sonpathri.
	" (open) ...	...	...	...	9,600	9,600	...	9,600		
	Total, Bhinga range		...	...	69,760	69,760	...	69,760	1,570	
	Total I		...	...	157,760	157,760	140	157,620	3,986	

[Form No. 51.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1892, TO ACCOMPANY REPORT FOR 1891-92—(*continued*).

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			I—Area under special protection—(continued).					
	Barehwa Range.		Acres.	Acres.	Acres.	Acres.	Rs.	
Gonda ...	Pipra ...	1880	4,583	4,583	447	4,136	310	
	Khyrman ...	...	4,730	4,730	231	4,499		
	Tikligarh ...	...	4,564	4,564	...	4,564		
	Rahtawal ...	...	4,381	4,687	...	4,687		
	Barehwa ...	...	4,143	4,143	...	4,143		
	Bhadwa ...	...	5,157	5,279	...	5,279		
	Tulsipur Range.							
	Nand Mahra ...	1880	3,337	3,337	...	3,337	214	
	Bhainsaur ...	...	5,647	5,647	...	5,647		
	Bhagelkhand ...	...	2,031	2,031	...	2,031		
	Odypur ...	...	1,748	1,748	...	1,748		
	Newalgarh ...	...	3,237	3,238	530	2,708		
	Janakpur ...	...	1,964	1,964	...	1,964		
	Jersa ...	...	1,951	4,451	...	4,451		
	Sungaraha ...	...	4,371	4,371	...	4,371		
	Mansarwa ...	...	1,966	2,097	140	1,957		
	Bhambhar Range.							
	Sakra ...	1880	4,462	4,462	...	4,462	226	
	Rajderwa ...	...	1,691	1,719	...	1,719		
	Bhumahar ...	...	2,875	2,875	...	2,875		
	Chandanpur ...	...	3,152	4,827	...	4,827		
	Nerehwa ...	...	4,882	4,911	117	4,794		
	Birpur ...	...	3,094	3,175	...	3,175		
	Marni ...	...	2,952	3,703	141	3,562		
	Kunchanpur ...	...	4,181	4,321	...	4,321		
	Nawabganj Sub-Division.							
	Jaipur (Andhura) ...	1880	216	216	...	216		
	Jaipur Bhainsahwa ...	1880	318	318	...	318		
	Shambhunagar ...	1880	474	474	...	474		
	Ramgarh ...	1880	2,583	2,583	8	2,575		
	Debinagar ...	1891	448	448	...	448		

	Jankinagar	1882	1,278	1,278	240	1,038			
	Lower Manuwar	1882	2,650	2,650	660	1,990	350		
	Upper "	1882	2,810	2,810	750	2,060			
	Ashrafabad	1887	533	533	...	533			
	Yaqub Bankat	1887	346	346	...	346			
	Jotipur	1891	618	618	...	618			
	Total I ...	...	47,060	52,140	2,389	48,751	...		
	" II ...	...	45,893	46,939	875	46,064	...		
	Total of I and II ...	...	92,915*	99,079	3,264	95,815	1,100	* 58 deducted for land given to B.-N.-W. Railway.	
			Area under special protection.						
	XVII-77, Rámgarh forest	1875	4,059 61	4,609·61	...	4,609·61			
	XVII-$\frac{80}{20}$, Tilkonia	...	1,857·25	1,857·25	...	1,857·25			
	XIII-11, Bhillampur	...	778·09	2,133·09	...	2,133·09			
	XVIII-$\frac{40}{14}$, North Banki	...	891·63	891·63	...	891 63			
	XVIII-$\frac{40}{7}$, South Banki	...	1,274·01	1,274·01	...	1,274·01			
	XVII-$\frac{19}{3}$, Bhari Babban	...	1,883 71	1,833·71	...	1,883·71			
Gorakhpur ...	XVII-20, " Baisi	...	4,109·79	4,109·79	...	4,109·79			
	XI-$\frac{232}{1}$, West Lehra No. 2	...	433 00	433·00	...	433 00			
	XI-232, " No. 1	...	11,757·28	11,757 28	225	11,532·28			
	XII-169, Dudhai Forest	...	9,947 90	9,947·90	...	9,947 90			
	XII-$\frac{170}{30}$, Jangal Majhar	...	2,255 91	2,255·91	...	2,225 91			
	XII-170, "	...	3,721·53	3,721·53	...	3,721·53			
	XI-231, East Lehra	...	8,094 61	8,094·61	...	8,094·61			
	X-45, Sonari	...	25,209·06	25,029·06	...	25,029·06			
	IX-7, Harnathpur	...	246·81	246·81	...	246·81			

[Form No. 51.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1892, TO ACCOMPANY REPORT FOR 1891-92—(*concluded*).

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
Gorakhpur—(*continued*).	IX-18, Parsrahwa ...	...	337·06	337·06	...	337·06		
	IX-20, Titri ...	...	873·04	873·04	...	873 04		
	IX-13, Madhaulia ...	1875	494 26	494·26	...	494·26		
	III-41, Nagwa forest	1885	15,174 04	15,174·04	...	15,174·04		
	Sissu plantation	1886	2,180·00	2.180·00	...	2,180·00	1,321	
	VII-13, Dome Khand No. 13	1891	5,073 23	5,073·23	...	5,073·23		
	VII-14, " " 14	...	595 75	595·75	...	595 75		
	VII-$\frac{14}{1}$, " " $\frac{14}{1}$	...	1.864·12	1,864·12	...	1,864 12		
	VII-$\frac{14}{2}$, " " $\frac{14}{2}$	...	3,025·49	3,025·49	...	3,025·49		
	VI-45, Bharath Khand	...	1,021·14	1,021·14	...	1,021·14		
	Gopal Ganj ...	...	55 00	55·00	...	55·00		
	Total I ...	...	107,161* 29,216 77,945	108,938	225	108,713	1,321	* 128 and 29,088 deducted for land given to Bengal and North-West Railway and for are sadded during the year.
	Total I ...	...	423,690	528,445	27,223	501,222		
	Total, II ...	...	45,893	106,224	10,907	95,317		
	GRAND TOTAL FOR THE CIRCLE ...	...	469,583	634,669	38,130	596,539	19,233	

NAINI TAL:
The 23rd July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

[Form No. 52.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

AREA OF PLANTATIONS, 1891-92.

Division.	Name of plantation.	Area in acres. On 1st April 1891	Added during the year.	Excluded during the year.	Area on 31st March 1892	Receipts— Of the year.	Charges— Of the year.	Remarks.
	Regular plantations.							
Bhira	Marha	32	..		32	...	23	Three hundred forty two blanks were replenished in the low shisham plot at Rs. 10-0-6, the balance was spent on nursery
	Total ...	32	..	.	32	.	23	
Bahraich	Nishangara	11	.	11	...	...	..	These experimental plantations have been entirely given up for years, having failed to be successful.
	Kain	5	..	5	...	..	...	
	Dondra	2	...	2	...	...	.	
	Ponsonbyganj	1	.	1	...	...	.	
	Total	19		19	..			
Gorakhpur ..	Ramgarh	303		...	303	..	.	
	Sonari (Madhaulia)	100	..	...	100	...	14	
	Sakhwa	2,204	2	...	2,206	...	153	
	East Lehra	40	...	...	40	.	7	
	Total	2,647	2	.	2,649	..	174	
	GRAND TOTAL, REGULAR PLANTATIONS ...	2,698	2	19	2,681	..	197	
	Cultural operations.							
Kheri	Saranta sissu plantation, Duduaghat ground .	1	...	.	1	.	...	
	Ditto ditto low ground ...		.	..		...		
	Sissu, khair and bamboos	30	.	.	30	...	107	
	Dudua forest garden	2	...	..	2	.	185	
	Total ...	33	.	.	33	..	292	
Bahraich	Experimental sowings of sál, ebony and mahuwa in Compartment III of Bhinga block and Raotara plain.	5	...	5	.	..	.	The experiments having failed, these have been given up
	Total ...	5		5	...	...	...	
Gonda	Nand Mahra Janakpur	1	..		1	...	47	
	Total of Cultural operations ...	39	...	5	34		339	
	GRAND TOTAL OF PLANTATIONS AND CULTURAL OPERATIONS.	2,737	2	24	2,715	..	536	

Abstract of changes in area of plantations.

	Acres.	Acres.
Total plantations of all classes		2,737
ADDED—Extended for new plantation	2	
DEDUCT—Failures, struck off .	24	
Net deduction		22
Total of all classes on 31st March 1892 ...		2,715

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W.

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DUR

Division	Timber in the rough; logs.					Timber in the rough; poles.				
	Government.	Purchasers.	Free grantees	Right-holders	Total.	Government.	Purchasers.	Free grantees	Right-holders.	Total.
	C ft.	C ft	C ft	C ft	C ft.	C ft.	C ft	C ft.	C ft	C ft
Pilibhit.										
Amelioration.										
Improvement fellings ...	...	..	.	...	...	280	...	..		280
Unclassed fellings... .	...	..		66	66	243	6,671	...	230,600	237,514
Total ...	...	...	...	66	66	523	6,671		230,600	237,794
Bhira										
Regeneration.										
Strip fellings ...	14	...	...	...	14	76	...	...	...	76
Amelioration.										
Improvement fellings	110	1,138	31	...	1,279	...	1,411	3,404	...	4,815
Unclassed fellings (widening fire lines and railway lines).	3,216	...	...		3,216	2,380	...	...	.	2,380
Total ..	3,340	1,138	31	...	4,509	2,456	1,411	3,404	...	7,271
Kheri.										
Regeneration.										
Selection fellings ...	71,075	9,249	...	...	80,324	...	...	...		...
Amelioration.										
Improvement fellings	.	...	...	...	..	...	...	.	...	...
Unclassed fellings	...	404	..	...	404	3,831	5,331	132,911	...	142,073
Total .	71,075	9,653	..	...	80,728	3,831	5,331	132,911	...	142,073
Bahraich.										
Regeneration.										
Selection fellings ...	...	47,428	...	..	47,428	...	37,367	...	...	37,367
Amelioration.										
Thinnings	7	..	...	...	7	6,147	...	...	...	6,147
Unclassed fellings	506	217,405	1,222	...	219,133	2,298	113,349	748,778	...	864,425
Total ...	513	264,833	1,222	..	266,568	8,445	150,716	748,778	.	907,939
Gonda.										
Regeneration.										
Selection fellings	564	..	...	...	564	389	...	...	...	389
Amelioration										
Improvement thinnings and strip fellings.		1,421		...	1,421	3,709	...	..	.	3,709
Unclassed { Green... ..	84		...	...	84	818	18,929	103,090	...	122,837
Unclassed { Dry	24,136	2,428		.	26,566	457	771	78	...	1,306
Total ...	24,786	3,849	...	..	28,635	5,373	19,700	103,168		128,241
Gorakhpur.										
Regeneration.										
Selection fellings		...	...	..	.	...	.		.	...
Amelioration.										
Improvement fellings ...	...	..	...	...	.	9,853	.	80	...	9,933
Thinnings ...	...	...	.	...		1,874	36	...		1,910
Unclassed fellings (clearance on boundary lines and roads)	614	12,913	...	.	13,527	2,832	2,756	...	...	5,588
Total ..	614	12,913	...		13,527	14,559	2,792	80	...	17,431
Grand Total ...	100,328	292,386	1,253	66	394,033	35,187	186,621	988,341	230,600	1,440,749

NOTE.—Although 5 square miles are shown in form 49 under unclassed forest

NAINI TAL:
The 7th July 1892

[Form No. 54.

PROVINCES AND OUDH, OUDH CIRCLE.

ING THE YEAR 1891-92 AND AGENCY OF EXPLOITATION.

Sawn or squared Timber.					Miscellaneous					Fuel.					Total.
Government.	Purchasers.	Free grantees.	Right-holders	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
C.ft.	C.ft.	C.ft.		C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.
I.—Reserved Forests.															
...	..	...	...	...	88	...	...	...	88	9,407	...	...	...	9,407	9,865
...	532	...	..	532	3	250	...	7,113	7,372	47,652	69,112	...	181,316	297,980	543,474
...	532	..	...	532	91	250	...	7,113	7,460	57,059	69,112	..	181,316	307,487	553,339
...	...	...	..	...	...	...	...	...	...	8,259	...	...	...	8,259	8,249
...	...	...	...	...	...	15,522	39,428	...	54,950	82,461	88,153	79,119	...	249,733	310,677
114	...	...	..	114	...	...	...	...	...	52,290	...	...	...	52,290	56,600
114	...	...	...	114	...	15,522	39,428	...	54,950	143,010	88,153	79,119	...	310,282	377,126
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80,224
145,680	2,718	...	...	148,407	...	...	...	...	...	...	...	...	...	...	148,407
...	1,569	3,768	...	5,337	...	52	46,998	...	47,050	...	17,238	175,828	...	193,066	387,980
145,680	4,287	3,768		153,744	...	52	46,998	...	47,050	...	17,238	175,828	...	193,066	616,661
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	84,705
...	...	...	...	...	...	...	...	...	...	284,056	...	...	...	284,056	290,310
74	...	...	...	74	...	71,900	493	...	72,393	29,388	66,594	17,900	...	113,882	1,268,997
74	...	...	..	74	...	71,900	493	...	72,393	313,444	66,594	17,900	...	397,938	1,644,012
613	...	...	.	613	...	8,927	...	...	8,927	...	...	...	...	...	10,493
...	...	...	...	...	...	...	...	...	..	453,430	...	...	...	453,430	458,560
...	...	...	.	..	..	...	...	...	..	6,000	...	...	...	6,000	128,921
...	104	...	.	104	...	18,510	255	...	18,765	300	254,864	12,454	...	267,618	314,359
613	104	..	...	717	...	27,437	255	..	27,692	459,730	254,864	12,454	...	727,048	912,333
...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	15	189	39	...	..	228	382,701	127,516	...	...	510,217	520,393
...	...	...	...	...	...	...	...	...	...	40,770	12,096	...	...	52,866	54,776
1,420	835	...	.	2,255	4,547	4,546	...	...	9,093	3,961	222,566	...	...	226,527	256,000
1,435	835	...		2,270	4,736	4,585	...	...	9,321	427,432	362,178	...	...	789,610	832,159
147,225	5,758	3,768	...	157,451	4,827	119,752	87,174	7,113	218,866	1,400,675	858,130	285,301	181,316	2,725,431	4,036,530

the outturn of these forests cannot be given separately for the year.

S. EARDLEY-WILMOT,

Conservator of Forests, N.-W. Provinces and Oudh

Oudh Circle.

[Form No. 55.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1891-92.

Division.	Description of produce.	Produce removed or utilized.										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
Pilibhit ...	Grazing ...	...	...	...	760	...	...	...	3,505	...	4,265	
	Baib grass ...	...	...	...	1,018	...	...	...	338	...	1,356	
	Other minor produce...	...	521	...	1,704	...	...	...	2,269	...	4,494	
	Total ...	...	521	...	3,482	...	...	...	6,112	...	10,115	
Bhira ...	Grazing ...	...	...	...	3,311	...	...	...	...	...	3,311	
	Baib grass ...	...	5,470	...	128	...	...	...	...	...	5,598	
	Mahua ...	...	...	...	72	...	...	...	...	...	72	
	Other minor produce ...	...	11	...	2,648	...	527	...	...	...	3,186	
	Total ...	...	5,481	...	6,159	...	527	...	...	...	12,167	
Kheri ...	Grazing ...	...	...	...	11,525	...	782	...	...	...	12,307	
	Cutch ...	...	...	...	8,630	...	...	...	...	...	8,630	
	Other minor produce...	...	...	...	1,427	...	8,040	...	...	...	9,467	
	Total ...	...	...	...	21,582	...	8,822	...	...	...	30,404	

Bahraich	Bamboos ...	...	...	...	...	406	...	...	...	...	406
	Grazing ...	...	...	...	...	20,940	...	...	...	...	20,940
	Baib grass	...	...	16,507	...	60	...	...	...	...	16,567
	Mahua ...	...	...	...	...	3,520	...	...	...	...	3,520
	Cutch ...	...	...	...	...	3,458	...	...	...	...	3,458
	Other minor produce...	...	...	215	...	4,473	...	2,830	...	...	7,518
	Total	...	...	16,722	...	32,917	...	2,830	...	...	52,469
Gonda	Grazing ...	...	...	...	...	5,802	...	...	...	...	5,802
	Baib grass	...	...	1,744	...	14	...	...	...	...	1,758
	Mahua ...	...	...	386	...	1,117	...	...	...	...	1,503
	Lime ...	...	...	3,414	...	15	...	...	...	...	3,429
	Other minor produce...	...	...	...	...	3,171	...	1,556	...	...	4,727
	Cutch ...	...	...	...	...	5,671	...	...	...	...	5,671
	Total	...	...	5,544	...	15,790		1,556	...	...	22,890
Gorakhpur	Bamboos ...	...	...	...	...	180	...	...	...	...	180
	Grazing ...	...	...	...	...	10,389	...	...	...	...	10,389
	Mahua ...	...	...	...	...	10	...	...	...	...	10
	Cutch ...	...	...	...	...	6,838	...	...	...	...	6,838
	Other minor produce...	...	...	14	...	20,114	...	...	...	...	20,128
	Total	...	...	14	...	37,531	...	...	...	...	37,545
	GRAND TOTAL	...	...	28,282	...	1,17,561	...	13,735	...	6,112	... 1,65,590
						ABSSRACT.					
Total ab-tract	Bamboos ...	...	...	...	...	646	...	...	...	...	646
	Grazing ...	...	...	...	...	52,727	...	782	...	3,505	57,014
	Baib grass	...	...	23,721	...	1,220	...	...	...	338	25,279
	Mahua ...	...	...	386	...	4,719	...	...	...	...	5,105
	Cutch ...	...	...	...	...	24,597	...	...	...	...	24,597
	Lime ...	...	...	3,414	...	15	...	...	...	...	3,429
	Other minor produce...	...	...	761	...	33,537	...	12,953	...	2,269	... 49,520
	GRAND TOTAL	...	...	28,282	...	1,17,461	...	13,735	...	6,112	... 1,65,590

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 56.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Pilibhít Division.				
Ridge poles and rafters	6	6		
Fuel	...	75,160		
Baib grass	Mds. 859	.		
Minor produce	" 5	.	6 Mds. 864	75,166
Bhíra Division.				
Sál poles	146	505		
Asna poles	1	2		
Pieces	25	233		
Fuel	...	104,025		
Baib grass	Mds. 4,586	...	250	
Minor produce	78 Mds. 79	...	Mds. 4,665	105,365
Kheri Division.				
Sál logs and pieces	4,857	232,271		
Asna " "	1,253	43,921		
Haldu " "	140	10,921		
Sál sleepers	332,947	503,928		
Asna "	61,222	92,084		
Sál scantlings	1,272	2,296		
Asna "	1,271	2,078		
Sál signal posts	6	151		
Miscellaneous bhondas	7,402	11,967		
Drift sissu logs	18	252		
Large boats	37	...		
Dugouts	530	...	410,955	899,869

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Disposals.				
To purchasers from sale depôts.				
Sál logs	19	1,001		
Asna "	249	12,801		
Miscellaneous bandas	30	..		
Sál sleepers (Kheri)	9,682	14,517		
Asna " "	5,632	8,448		
Sál scantlings	39,110	25,057		
Asna "	1,689	1,533		
Sissu "	17	7		
Asna slabs	56	40		
Sál pieces	St. 1 Mds. 545	...		
Thin sál planks	St. 14 Mds. 1,460	2		
Sissu pieces...	6 Md. 1	...		
Deodár scantlings	21	8		
Tún scantlings	34	21		
" planks	4	3		
Sissu	4	3		
Mango wood	Mds. 32	...		
Sál slabs	3,235 Mds. 840	3,239		
" planks	3,931	2,883		
" battens	17,830	2,583		
" sleepers	4,327	11,314		
" scantlings	18,495	15,607		
Asna battens	2,821	480		
Sál botas	104	1,227		
Sissu botas	1	1		
" cartwheels	4	5		
Sál offcuts	9,428 Mds. 13,725	...		

Bahrámghát Division.				
Sál logs	568	24,100		
Asna „	113	5,607		
Sál scantlings	11,864	10,414		
Asna „	190	112		
Sissu „	1	1		
Deodár „	46	16		
Babool	250	16		
Sál pieces	1 / Mds. 53	...		
„ sleepers	6,644	9,966		
Asna „	11,478	17,217		
Sál offcuts	173 / Mds. 193	...		
„ planks	1	...	31,329	67,449
Large boats	1	. .	Mds. 250	
Drift timber	999	6,108	999	6,108
Lucknow Depôt.				
Sál scantlings	2,669 / Mds. 840	1,509		
Asna „	22	50		
Sál sleepers	146	219		
„ offcuts	376 / Mds. 1,362	...		
„ pieces	1 / Mds. 231	...	3,216	1,778
„ planks	2 / Mds. 690	...	Mds. 3,123	
Bahraich Division.				
Sál logs	33	1,563		
„ offcuts	5,875	10,961		
„ sleepers...	682	774		
„ poles	4,811	63,883		
Asna „	4	123	11,305	78,280
Fuel, Lucknow and Bahrámghát	Mds. 488	976	Mds. 488	
Gonda Division.				
Sál poles	771	1,542		
Asna pieces	5	25		
„ offcuts	364	393		
Jamun logs	27	108		
„ offcuts	85	43		
Dhau „	15	60		
Sál piles	2	46		
„ scantlings	53	41		
Asna „	207	202		
„ logs	445	2,905		
„ pieces	692 / Mds. 1,284	...		
Asna botas	4	92		
Firewood	Mds. 13,963	...	117,440	101,832
Asna pieces	„ 24	...	Mds. 31,874	
To purchasers from forest depôts.				
Sál logs and pieces	1,526	4,911		
Asna „ „	405	2,545		
Sál sleepers	125,975	189,262		
Asna „	41,718	62,576		
Sál scantlings	651	1,641		
Asna „	1,022	1,782		
Sál offcuts	5,958	11,044		
Firewood	Mds. 337,349	846,351		
Sal poles	10,604	39,801		
Asna „	486	469		
Miscellaneous poles	70	134		
Sál signal posts	4	118		
Baib grass	Mds 21,389	...		
Long „ (phus, sirki, &c.)	2,204	...		
Asna offcuts	433	227		
Munj	Md. 1	...		
Canes	24,754	...		
Sissu slabs	1	2		
„ props and posts	35	73		
Dhau logs	4	16		
„ handles	400	22		
Jamun logs	1	21		
Mahua rafters	400	125		
Baib grass	Mds. 6,612	...		
Mahua seeds	„ 8	...		
Lime	„ 9,560	...		
Mahua flowers	„ 811	...		
Sál slabs	1,019	..		
Miscellaneous bhoudas	33	50		
Drift timber	6,359 / Mds. 16,179	70,097		
Stacked fuel	...	34,333		
Fuel branches	...	500		
Baib, munj and senk grass	Mds. 845	...		
Ballis and poles	21	110		
Pieces of wood	38	238		
Hara, behra and aula	Mds. 25	...		
Sál bark	„ 23	...		
Bhangy	„ 1	...		
Hides	„ 78	...		
Sál box	1	3		
„ sugarmill mortars	1,558	1,028		
„ doors and frames	78	185		
Sissu pieces	4	4	225,861	1,267,664
Sál board	1	1	Mds. 382,303	

[Form No. 56.

FOREST DEPARTMENT, N W PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92—(*continued*).

Particulars.	Number or quantity	Cubic feet.	Total of each head: Number or quantity.	Total of each head: Cubic feet.
Balance at commencement of the year—(*concluded*)				
Gonda Division—(continued).				
Sál sleepers	9,068	13,602		
Baib grass	Mds 808			
Minor produce	2,110			
Fuel	59,600	119,200	11,182	138,473
Sal offcuts	140	300	Mds. 62,518	
Gorakhpur Division				
Sal poles	5,789	8,258		
„ pieces	1,771	1,771		
„ planks	103	25		
„ offcuts	96	96		
„ sleepers	275	412		
„ doors frames	39	169		
„ sugarmill mortars	706	614		
„ scantlings	41	20		
„ logs	1	10		
„ patri	54	6		
Asna poles	1,026	1,180		
Sissu pieces	4	4		
Jamun „	5,151	5,151		
Miscellaneous poles	209	215		
Drift timber of Gunduck	998	3,350		
„ „ Rapti	1 778	2,675	18,041	88,644
	Mds 231			
Firewood	32,344	64,688	Mds. 32,575	
Total balance { No.	.	.	487,283	1,461,132
Total balance { Mds.	...	...	104,483	

Particulars.	Number or quantity.	Cubic feet.	Total of each head: Number or quantity	Total of each head: Cubic feet
To purchasers locally.				
Sál logs and pieces	230	2,036		
„ poles	1,023	2,956		
Asna logs	250	3,623		
„ poles	70	470		
Miscellaneous logs	1,114	9,424		
„ poles	51	313		
Sál scantlings	101	65		
Long grass (phus)	3,666	.		
Sissu log	345	2,304		
Haldu „	337	5,115		
Dhau „	57	279		
Jaman „	163	2,099		
Haldu „	4	12		
Sissu „	8	45		
Dhau „	3	13		
Jaman „	2	6		
Waif and stray wood logs	3	126		
Sal pugs	302	60		
Uprights and poles	12	29		
Pieces of wood	.	88		
Bed	1	3		
Grass, carts	21	.		
	Md. 1			
Other minor produce	3	...		
Firewood	Mds. 37,203	74,406		
Sal withes	7,593	1,899		
„ cart manufacture	1	15	15,361	105,393
Karma large poles	1	8	Mds 37,204	
To lost or written off.				
Fuel	Mds 488	2,218		
Sal sleepers	...	.		

Receipts.

From the forests in sale depôts.				
Sál logs and pieces	1,952	85,300		
Asna logs	337	15,364		
Difference in measurement	...	183		
Sál sleepers	1,094	1,641		
Asna "	2,010	3,015	5,393	105,503
Firewood	Mds. 17,043	...	Mds. 17,043	
Received from the forests in depôts (other than sale depôts)				
Sál logs and pieces	2,816	69,539		
Asna logs	25	250		
Sál sleepers	1	2		
Firewood	Mds. 338,137½	868,535		
Sál poles	23,242	86,030		
" props and posts	1,139	917		
Asna poles	75	150		
" offcuts	288	144		
Sissu slabs	1	2		
" props and posts	35	73		
Haldu logs	4	40		
Sál board	1	1		
Dhau logs	1	16		
Jamun "	1	21		
Minor produce: Baib grass	Mds. 33,245	..		
Minor produce: Munj	" 1	...		
Minor produce: Mahua seed	" 2	..		
Minor produce: Sirki and phus (palas)	2,204	...		
Minor produce: Lime	Mds. 7,587	...		
Minor produce: Canes	24,754	...		
Minor produce: Mahua flowers	311	..		
Minor produce: Bail, munj and sink grass	4,571	..		
Minor produce: Sál bark	23	...		
Hides	21	...		
Planks	392	114		
Piece of wood	391	3,340		
Ballies and poles	461	2,456		
Sál box	1	3		
Miscellaneous bhondas	2,554	3,831		
" poles	69	132		
Sál scantlings	226	118		
" doors and frames	39	16		
" and tún planks	685	3,884		
Stacked fuel	..	56,559		
Sál offcuts	246	52		
Fuel branches	...	500		
Large boats	14	...		
Drift timber	45			
" fuel	Mds. 170	681		

Miscellaneous bhondas	5,681	8,521		
Baib grass	Mds. 123	...		
Sál bark	" 18	...	5,681	
Mahua	" 35	...	Mds. 664	10,739
To conversion in depôts.				
Sál logs	2,207	95,942		
Asna "	159	5,493		
Tún "	3	61		
Sissu "	11	200		
Scantlings (sál)	1,959	4,696		
Asna	160	159		
Tún slabs	2	5		
Asna half logs	22	810		
Sál " "	1,151	11,200		
Tún " "	1	8		
Difference in measurement	..	2		
Tún botas	5	30		
" offcuts	6	11		
Sál slabs	12	36		
" planks	135	153		
" battens	92	21		
" sleepers	28	81		
" scantlings	202	384		
Asna battens	4	2		
Sál botas	1,375	22,920		
Sissu "	8	77		
Deodár "	7	40		
Sál offcuts	8,602 / Mds. 573	33,964		
" khauch	1,428	2,289		
Asna botas	64	1,360		
" offcuts	361	2,778		
" pieces	64	87		
Sissu offcuts	5	5		
" pieces	4	4		
" half logs	7	38		
Jamun logs	27	108		
" offcuts	81	40	18,262 / Mds. 573	183,030
Pieces of fuel		7		
Used departmentally.				
Sissu scantlings	52	21		
Sál "	678	752		
Tún "	8	10		
Sál "	65	41		
Sissu "	15	6		
" planks	256	56		
Sál slabs	1	3		
" battens	74	7		

[Form No. 56.

FOREST DEPARTMENT, N.-W PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÒTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92—(*continued*).

Particulars.	Number or quantity.	Cubic feet	Total of each head. Number or quantity.	Total of each head. Cubic feet.
RECEIPT—(*continued*).				
Received from the forests in depôts (other than sale depôts)—(continued).				
Drift timber: Gundack	2,235 / Mds 9,030	29,773		
Drift timber: Rápti	1,328 / Mds. 6,724	18,087	66,748	
Drift timber: Bahrámghát	3,454 / Mds. 230	32,064	Mds. 400,025	1,177,350
Received from forests and sold locally.				
Sál logs and pieces	228	1,988		
„ poles	1,015	2,828		
„ scantlings	101	65		
Asna logs and pieces	250	3,623		
„ poles	68	446		
Long grass (plus), bundles	2,600	...		
Miscellaneous logs and pieces	1,114	9,424		
„ poles	51	313		
Sissu logs and pieces	345	2,304		
Haldu „ „	337	5,115		
Dhau „ „	57	279		
Jamun	163	2,098		
Sissu poles	8	45		
Haldu „	4	12		
Dhau „	3	13		
Jamun	2	6		
Saplings	302	60		
Upright and poles	183	463		
Pieces of wood	..	83		
Bed	1	3		
Grass, carts	21	...		
Other minor produce	Md. 1 / 3	...		
Firewood	Mds. 37,203	74,406		

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Used departmentally—(concluded).				
Sál offcuts	41 / Mds. 51	...		
„ pieces	50 / St. 1,413 / Mds. 20,761	...		
Jamun pieces	5,151	5,151		
Tún offcuts	16 / Md. 1	...		
Miscellaneous poles	189	156		
Sal botas	10	19		
Asna khaneh	61 / St. 22 / Mds. 703	11		
Drift timber	349	918		
Firewood	Mds. 304	12,116		
Sál poles	104	187		
„ thin poles	Mds. 92	...		
Bankas	„ 180	...		
Sál logs and pieces	42	1,567		
Asna poles	589	846		
Sál props and posts	53	239		
Asna logs and pieces	25	250		
„ offcuts	109	227		
„ scantlings	267 / st 8	235		
Sál pieces	8 / Mds. 60	148		
Asna sleepers	352	529		
Haldu logs	4	40		
Dhau offcuts	15	60		
Jamun „	4	3		
Lime	Mds. 110	...		
Sál sleepers	40	127		
Upright and ridge poles	152	331	10,428	24,092
Pieces of wood	5	26	Mds. 22,262	

Sál withes ...	7,593	1,899	...	...
„ cart manufacture	1	15	15,517	105,501
Karma large poles	1	8	Mds. 37,204	
Received by conversion in depôts.				
Asna offcuts	562	2,976	...	...
„ scantlings	111,126	146,494	...	...
„ sleepers	104	164	...	...
Sál logs and pieces	110	1,676	...	...
Dhau handles	400	22	...	...
Mahua rafters	400	125	...	...
Sál sugarmill frames	29,825	11,639	...	...
„ door ...	1,374	1,002	...	...
„ scantlings	6,062	6,239	...	...
Signal posts	12	179	...	...
Asna beams...	38	712	...	...
Sál slabs ...	1,019	...	...	...
„ sleepers...	5,062	13,140	...	...
„ pieces ...	St. 7 Mds 345	116	...	...
Sissu „ ...	6 Md. 1	...	...	...
Sál planks ...	5,160	3,498	...	...
„ battens ...	20,379	3,201	...	...
„ karries (scantlings)...	21,030	19,553	...	...
Asna battens	3,503	588	...	...
Sissu scantlings	212	62	...	...
Asna slabs ...	126	117	...	...
Thin sál planks	12 Mds. 912	2	...	...
Asna pieces...	St. 1 Mds. 10	...	...	...
„ planks	3	2	...	...
Deodár scantlings	28	14	...	...
Tún „	44	32	...	...
„ planks	4	3	...	...
Sissu „	262	63	...	...
„ slabs	5	1	...	...
Deodár „ ...	15	6	...	...
Tún „ ...	14	7	...	...
Sál „ ..	3,507	3,577	...	...
Asna half logs	92	812	...	...
Sál „	1,302	12,367	...	...
Tún „	3	17	...	...
„ botas ...	3	33	...	...
„ offcuts ...	Md. 1 22	11	...	...
Sissu botas ...	16	91	...	...
Sál offcuts ...	16,702 10,322	35,043	...	...
„ pieces ...	St. 1,443 6,107 Mds. 25,175	2,961	...	...

To transfers.				
Sál sleepers	2,405	3,765		
„ scantlings	973	1,116		
Asna sleepers	2,259	3,399		
Sal scantlings	1,377	1,078		
„ pieces	Mds. 303	...		
Thin sál planks	„ 709	...		
Sál planks ...	281	258		
„ battens	2,222	306		
„ offcuts	Mds. 4,992 4,607	892		
„ khaneh	Mds. 2,703 2,217	521		
Firewood	Mds. 30,198	74,511		
Sál logs ...	1,952	85,300		
Asna logs ...	387	15,304	18,635	186,500
Baib grass	Mds. 1,138	...	Mds. 40,048	
To deficit in weight.				
Fuel	Mds. 2,839	.	Mds. 2,839	...
To made over to claimants.				
Drift timber	354 Mds 91	1,333	354 Mds. 21	1,393
To share of hide collector.				
Hides	4	...	4	
Total disposal ... Numbers	...	...	412,026	1,880,693
Total disposal ... Maunds	...	...	517,788	
Balance at close of the year.				
Pilibhít Division.				
Rafters and poles	25	109		
Sál and tún planks	68	..		
Stacked fuel	...	97,386		
Baib and sink grass	Mds. 99	...	93	97,495
Other minor produce	„ 1	...	Mds. 100	
Bhira Sub-Division.				
Poles	572	2,723		
Pieces of wood	315	3,454		
Planks	252	73	1,319	6,250
Fuel	..	56,260	...	56,260
Baib grass	Mds. 3,508	...	3,508	
Hides	17	...	17	

[Form No. 56.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92—(*continued*).

Particulars.	Number or quantity.	Cubic feet.	Total of each head	
			Number or quantity	Cubic feet.
Receipts—(*concluded*).				
Received by conversion in depôts—(continued)				
Asna pieces	107 St 31 Mds 791	123	...	...
Sissu offcuts	33 St 7	7	...	...
„ pieces	9 Mds. 14	10	.	...
Sál bolas	1,601	25,386	...	...
Asna	101	2,036	..	...
Sissu half logs	11	39	...	
„ cart wheels	4	5	23³,006	294,166
Pieces of wood	7	15	Mds. 37,568	
By transfer.				
Sál sleepers	2 757	4,267		
„ scantlings	1,377	1,282		
Baib grass...	Mds. 1,138	.		
Fuel	„ 13,155	40,483		
Thin sál planks	281 Mds. 709	258		
Sál offcuts	6,824 Mds 8,755			
„ pieces	„ 308	...		
Asna sleepers	249	374		
Sal battens	2,222	306	14,592	47,902
„ scantlings ...	882	912	Mds. 24,065	
Written back				
Sleepers	20,000	30,000	20,000	30,000

Particulars.	Number or quantity	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.
Balance at close of the year—(*continued*).				
Khera Division.				
Sál logs	5,722	216,535		
Asna „	916	28,557		
Haldu	140	10,921		
Drift sissu logs ..	18	232		
Sal sleepers .. . .. 14 × 6 × 8	103	494		
Ditto . . ... 12 × 8 × 4½	9	27		
Ditto ... ... 10 × 10 × 5	62	215		
Ditto ... ... 6 × 8 × 6	7,435	14,870		
Ditto .. ... 6 × 8 × 4½	218,760	328,140		
Sal sugarmill frames	29,825	11,639		
„ doors	1,374	1,002		
„ scantlings	4,458	4,867		
„ signal posts	14	217		
Asna sleepers .. ... 6 × 8 × 6	218	436		
Ditto . ... 6 × 8 × 4½	23,164	34,888		
Asna scantlings	84,874	128,405		
„ beams	38	712		
Miscellaneous bhondas	4,242	7,227		
Large boats	51	...		
Dugouts	530	.	381,953	789,404
Bahráighát Division.				
Sál logs	294	12,457		
Asna logs ...	87	3,185		
„ sleepers (Kheri)	7,856	11,784		
Sal scantlings	40	42		
Asna „	421	539		
Sissu „	129	29		
Asna slabs	70	77		
Sal pieces	...	Mds. 24		
Thin sál planks	...	„ 51		
Deodar scantlings	53	22		
Tún „	2	1		

Returned by indenting officers.				
Sál sleepers	300	600		
" scantlings	3,513	538		
" battens	70	30	3,883	1,168
Miscellaneous receipts.				
Sál logs	1	45		
Asna sleepers	1	3		
Sál scantlings	666	739		
	St. 1			
Firewood	Mds. 205	...	699	787
Miscellaneous bhondas	30	...	Mds. 205	

Sissu planks	142	35		
" slabs	5	1		
Deodár "	15	6		
Túna	12	2		
Túna half logs	2	9		
Sál "	151	1,107		
Túna botas	1	13		
Sál slabs	261	299		
" planks	1,094	462		
" battens	2,335	601		
" sleepers	707	1,745		
" scantlings	5,597	3,548		
Asna battens	678	108		
Sál botas	112	1,220		
Sissu "	8	28		
Sál offcuts	890	Mds. 1,079		
" "	510	187		
" pieces	75	151		
" "	1,646 / St. 29	Mds. 427		
Asna botas	33	584		
" offcuts...	36	115		
Firewood	...	Mds. 107		
Asna pieces	St. 9	" 64		
" "	33	36		
Sissu offcuts	28	St. 2 / Mds. 7		
" pieces	5	6 / Mds. 4		
" half logs	4	1		
Large boat	1	...		
Babul scantlings	250	16		
Asna sleepers	2	11		
" planks	3	2	23,627	
" pieces	St. 1	Mds. 10	Mds. 1,773	38,429
Bahrámghát drift timber.				
Sál logs	35	1,400		
" poles	93	844		
Asna "	66	851		
Sissu logs and pieces	1,138	6,795		
Khair	124	534		
Kain	91	1,241		
Jamun	58	531		
Túna	58	242		
·haghari	95	564		
Kakath	139	1,652		
Chaurandhi s'issu	2	9		
Tendoo	9			
Sandan	9	1,063		
Miscellaneous timber	53			
Asna logs	10	416		
Deodár "	8	132		
Canoes	9	...	1,997	16,274

[Form No. 56.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS, OR SOLD LOCALLY, DURING THE YEAR 1891-92—(*concluded*).

Particulars.	Number or quantity.	Cubic feet.	Total of each head.		Particulars.	Number or quantity.	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.				Number or quantity.	Cubic feet.
					BALANCE AT CLOSE OF THE YEAR—(*concluded*).				
					Lucknow Depôt.				
					Sál offcuts	97	Mds. 388		
					„ battens	67	8		Mds 388
					„ scantlings	66	105	230	113
					Bahraich Division.				
					Sál logs (sajauli)	25	1,379		
					„ poles „	3,300	42,681		
					Asna „ „	1	51		
					Fuel „	Mds. 19,613	39,226		
					Baib grass	„ 5,053	...		
					Sál poles (Bahraich)	„ 2,329	2,901		
					Fuel	Mds. 15,082	30,164		
					Baib grass	„ 6,172	...	5,655	158,476
					Fuel (Nepalganj)	„ 21,037	42,074	66,957	
					Gonda Division.				
					Sál poles	1,311	2,274		
					„ offcuts	140	300		
					Asna „	255	172		
					„ scantlings	60	110		
					„ sleepers	2,932	4,398	4,698	7,254
					Fuel	Mds. 17,300	44,980	17,300	44,980
					Minor produce. { Asna bark 12 mds.				
					Minor produce. { Sál „ 5 „				
					Minor produce. { Bankas 92 „	113	...	113	
					Minor produce. { Mahua seed 4 „				
					Gorakhpur Division.				
					{ Sál poles 311 933 ...				
					{ „ „ 1st class 71 674 ...				

							Sál poles...	„ „ 2nd „	2,597	19,477	...				
								„ „ 3rd „	4,871	29,226	...				
								„ „ 4th „	3,364	10,092	...				
								„ „ 5th „	3,043	6,086	...				
								„ ridge poles	1,895	3,803	...				
								„ small „	812	1,624	..	16,964	71,915		
								„ pieces (botas)	...	...	...	1,088	1,086		
								„ off cuts „	...	...	...	235	65		
								„ sleepers „	...	...	...	275	412		
							Sugar-mill pots, &c.	„ sugar-mill pots	98	196	...				
								„ legs of mill sets	136	68	...	234	264		
							Asna large poles ...			...	..	29	87		
							Miscellaneous jaman poles			...	..	19	57	18,868	73,886
							Firewood ...			...	...	Mds. 12,650	50,600	Mds. 12,650	50,600
							Rapti ...	Numbers		...	...	1,043	1,113	1,738	3,395
								Maunds		...	...	15		15	
							Gaunduck ...			...	...	695	2,282		
Total Receipt ...	Numbers	...	..	...	...	364,838	1,762,377	Total balance ...	Numbers	...	...	...	...	440,095	1,342,816
	Maunds	...	...	...	...	516,110			Maunds	...	...	...	...	102,805	
GRAND TOTAL ...	Numbers	...	...	...	...	852,121	3,223,509	GRAND TOTAL ...	Numbers	...	...	...	...	852,121	5,223,509
	Maunds	...	...	...	...	620,593			Maunds	...	...	...	...	620,593	

KAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh,
Oudh Circle.

[Form No. 57.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1891-92.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
Timber.	I.—BAHRÂMGHÂT SALE DEPÔT.								
			Rs.			Rs.	Rs.	Rs.	
Sâl logs	568	24,100	18,075	294	12,457	9,342	...	...	
,, scantlings	11,864	10,414	7,810	40	42	32	...	...	
,, sleepers	6,644	9,966	9,966	...	...	...	...	...	
,, pieces	St. 1	Mds. 53	26	...	Mds. 24	12	...	...	
,, thin planks	...	,, 1	1	...	51	51	...	...	
,, offcuts	173	,, 196	49	1,400	Mds. 1,079 187	633	...	...	
,, half logs	...	...	...	151	1,107	630	...	...	
,, slabs	...	...	...	261	299	119	...	...	
,, planks	...	...	...	1,094	462	404	...	...	
,, battens	...	...	...	2,335	601	526	...	...	
,, harris	...	...	...	66	105	92	...	...	
Asna sleepers	11,478	17,217	8,608	7,856	11,784	5,892	...	...	
,, scantlings	190	112	56	421	539	269	...	...	
,, logs	113	5,607	2,803	67	3,185	1,592	...	...	
,, slabs	...	...	...	70	77	20	...	...	
,, battens	...	...	...	678	106	53	...	...	
,, botas	...	...	...	33	584	219	...	...	
,, offcuts	...	...	...	36	115	29	...	...	
,, pieces	...	...	...	33 St. 9	36 Mds. 04	25	...	...	
,, sleepers	...	...	...	2	11	5	...	...	
,, planks	...	...	...	3	2	1	...	...	
,, pieces	...	...	...	St. 1	Mds. 10	5	...	...	
,, scantlings	22	50	25	...	...	...	...	...	
Sissu ,, ...	1	1	...	129	29	14	...	...	
,, planks	...	...	...	142	35	17	...	...	
,, slabs	...	...	...	5	1	...	...	...	
,, botas	...	...	...	8	28	14	...	...	
,, offcuts	...	...	...	28	2 Mds 7	2	...	...	
Sâl sleepers	...	...	...	707	1,745	1,745	...	...	
,, scantlings	...	...	...	5,597	3,548	2,661	...	...	
,, botas	...	...	...	112	1,220	910	...	...	
,, pieces	...	...	...	1,721 St. 29	151 Mds. 427	217	...	...	
,, thin planks	St. 2	Mds. 690	690	...	...	...	...	...	
,, sleepers	146	219	219	...	...	...	...	...	
,, offcuts	376	Mds 1,362	681	97	Mds. 388	194	...	...	
,, scantlings	2,067 St. 2	1,509 Mds. 840	1,761	...	...	...	...	...	
,, pieces	,, 1	,, 231	115	...	...	...	...	...	
,, battens	...	...	...	67	8	7	...	...	
Sissu pieces	...	...	...	5	6 Mds. 4	2	...	...	
,, half logs	...	...	...	4	1	1	...	...	
Tûn slabs	...	...	...	12	2	...	...	...	
,, half logs	...	...	...	2	9	3	...	...	
,, botas	...	...	...	1	13	5	...	...	
,, scantlings	...	...	...	2	1	...	...	...	
Deodâr ,, ...	46	16	8	53	22	4	...	...	
,, slabs	...	...	...	15	6	1	...	...	
Babul scantlings ...	250	16	4	250	16	4	...	...	
Boat, large	...	...	...	1	...	100	...	...	
TOTAL, TIMBER ...	34,544	60,227 Mds. 3,373	50,892	23,357	38,435 Mds. 2,054	26,061	...	24,831	
Drift collections	999	6,108	1,522	1,997	16,274	4,068	2,546	...	
Firewood	...	...	...	...	107	24	24	...	
GRAND TOTAL ... No.	35,543	75,335	52,414	25,354	54,816	30,153	...	22,261	
GRAND TOTAL ... Mds.	...	3,373	...	...	2,054	...	...	...	

[Form No. 57.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1891-92—(*continued*).

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favor of the year.	Against the year.	
II.—OTHER FOREST AND SALE DEPÔTS.									
			Rs.			Rs.	Rs.	Rs.	
Logs and pieces	13,973	290,016	1,29,724	23,799	290,915	1,20,305	...	9,320	
Asna logs and pieces ...	...	...	...	916	28,557	3,570	3,570	...	
Haldu logs	...	...	...	140	10,921	2,730	2,730	...	
Sál sleepers and scantlings ...	407,039	615,608	5,67,228	234,108	353,750	3,52,646	...	2,14,582	
Asna sleepers	...	...	...	108,294	164,441	82,220	82,220	...	
Miscellaneous	7,402	11,967	748	4,243	7,278	454	...	294	
Large boat	...	...	...	51	...	21,395	21,395	...	
Dugouts	...	...	...	530	...	11,450	11,450	...	
Offouts	6,575	11,857	667	654	537	126	...	541	
Asna and Jaman ballas ...	...	...	...	19	57	10	10	...	
Rafters	...	...	...	25	109	14	14	...	
Sál and tún planks ...	...	...	...	1,287	6,250	1,177	1,177	...	
Manufactured articles ...	604	735	197	31,433	12,905	12,715	12,518	...	
Poles and saplings ...	12,707	75,688	13,121	6,960	47,943	4,665	...	8,457	
Total, Timber ...	448,300	1,014,871	7,11,085	412,468	923,668	6,13,567	...	98,118	
Drift collections ... No. ...	2,704	6,277	1,725	1,756	3,047	1,183	...	542	
Drift collections ... Mds. ...	..	231	...	15	...	...	...	...	
Firewood and charcoal ...	...	364,649	22,102	...	360,090	16,665	...	5,437	
Minor produce ... No. ...	78	...	7,204	17	...	8,883	1,679	...	
Minor produce ... Mds. ...	8,447		...	...	...	...	...	...	
GRAND TOTAL ... No. ..	451,172	1,385,797	7,42,716	414,241	1,288,000	6,40,298	...	1,02,418	
GRAND TOTAL ... Mds. ...	8,678	...	...	15	...	...	...	...	
ABSTRACT.									
Timber and drift No. ...	486,637	1,096,483	7,65,824	440,078	982,010	6,44,879	...	1,20,945	
Timber and drift Mds. ...	3,604	..	...	15	2,054	...	...	...	
Firewood and charcoal ...	...	364,649	22,102	...	360,797	16,689	...	5,413	
Minor produce ... No. ...	78	...	7,204	17	...	8,883	1,679	...	
Minor produce ... Mds. ...	8,447	...	.	...	...	...	...	...	
GRAND TOTAL ... No. ...	486,715	1,461,132	7,95,130	440,095	1,342,816	6,70,451	...	1,24,679	
GRAND TOTAL ... Mds. ...	12,051	...	...	15	2,054	...	...	...	

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

[Form No. 57A.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK AND BUILDINGS FOR THE YEAR 1891-92.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favor of the year.	Against the year.	
			Rs.			Rs.	Rs.	Rs.	
Direction Division—									
Dead stock	74	...	446	100	...	903	457	...	
Pilibhit Division—									
Live stock	1	...	1,425	1	...	1,425	...	...	
Dead "	1,736	...	1,176	1,428	...	1,176	...	...	
Buildings	26	...	7,600	27	...	7,600	...	...	
Total ...	1,763	...	10,201	1,456	...	10,201	...	..	
Bhira Division— ...									
Dead stock	872	...	2,088	1,109	...	1,876	...	212	
Buildings	17	...	9,662	17	...	9,662	...	...	
Total ...	889	...	11,750	1,126	...	11,538	...	212	
Kheri Division—									
Live stock	4	...	3,703	3	...	5,108	1,405	...	
Dead "	37,178	...	32,813	42,929	...	32,800	487	...	
Buildings	33	...	34,445	33	...	34,445	...	...	
Total ...	37,215	..	70,461	42,965	.	72,353	1,892	...	
Bahramghat Division—									
Live stock	10	...	103	10	...	103	...	...	
Dead "	858	...	40,994	840	...	42,855	1,861	...	
Buildings	17	...	9,310	16	...	9,310	...	..	
Total ...	885	...	50,407	866	...	52,268	1,861	...	
Bahraich Division—									
Live stock	1	...	2,470	1	...	2,470	...	...	
Dead stock	2,110	...	4,186	2,169	...	3,959	...	227	
Buildings	34	...	41,565	34	...	44,560	2,995	...	
Total ...	2,145	.	48,221	2,204	...	50,989	2,768	...	
Gonda Division—									
Dead stock	541	...	1,848	572	...	2,030	182	. .	
Buildings	24	...	13,095	28	...	18,870	5,775	...	
Total ...	565	.	14,943	600	...	20,900	5,957	..	
Gorakhpur Division—									
Live stock	2	...	2,340	2	...	2,340	...	...	
Dead "	51,270	...	3,903	1,494	...	4,368	465	. .	
Buildings	31	...	11,594	33	...	15,877	4,283	...	
Total ...	51,303	...	17,837	1,529	...	22,585	4,748	...	
			ABSTRACT OF THE CIRCLE.						
Live stock	18	...	10,041	17	...	11,446	1,406	...	In this form all buildings of whatever class have been included.
Dead "	94,639	...	86,954	50,641	...	89,967	3,013	...	
Buildings	182	...	1,27,271	188	...	1,35,493	8,222	...	
Total ...	94,839	...	2,24,266	50,846	...	2,36,906	12,641	...	

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

[Form No. 58.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH OUDH CIRCLE.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1891-92.

Budget heads.	Revised estimate for 1891-92.	Direction.	Kheri Division.	Bhira Division.	Bahrámghát Division.	Bahraich Division.	Gonda Division.	Gorakhpur Division.	Pilibhít Division.	Total.
RECEIPTS.	Rs.	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p
I.—Timber and other produce removed from the Forests by Government agency—										
a Timber	4,48,680	...	2,47,518 0 11	54 14 8	92,004 6 8	4,705 13 9	8,630 2 5	6,208 3 4	10 13 11	3,59,132 7 8
b. Firewood and charcoal	80,000	...	...	9,874 11 5	3,399 9 4	1,039 6 1	16,086 7 9	32,174 4 1	1,991 14 8	64,516 5 4
c. Bamboos	...	...	...	...	...	...	...	...	...	...
d. Sandal-wood	..	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce	40,600	...	...	5,481 4 9	...	16,722 1 3	5,543 9 0	14 2 8	520 14 4	28,282 0 0
II.—Timber and other produce removed from the Forests by consumers or purchasers—										
a. Timber	1,26,300	...	9,532 8 1	402 12 10	...	1,25,665 4 0	9,590 5 6	1,655 6 3	1,212 3 6	1,48,058 8 2
b. Firewood and charcoal	6,600	...	334 8 0	634 12 4	...	1,464 10 0	1,788 0 6	4,802 0 0	2,216 7 0	11,240 5 10
c. Bamboos	500	...	...	..	...	465 10 6	...	180 0 0	...	645 10 6
d. Grazing and fodder grass	53,400	...	11,524 14 6	3,310 5 3	...	20,940 2 1	5,801 11 9	10,388 9 0	760 4 0	52,725 14 7
e. Other minor produce	52,500	...	10,056 9 0	2,847 14 6	...	11,511 8 0	9,988 7 3	26,961 14 6	2,721 11 9	64,088 1 0
III.—Drift and waif wood and confiscated forest produce.	28,000	...	11 0 9	55 1 6	10,649 13 7	287 11 7	1,068 5 10	4,636 7 10	130 6 3	16,838 15 4
IV.—Revenue from forests not managed by Government—										
a. Duty on foreign timber and other forest produce	...	...	...	...	...	..	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	..	..	.	..	...	...
V.—Miscellaneous—										
a. Fines and forfeitures	560	...	...	39 10 0	...	240 11 9	298 12 0	482 10 6	3 0 0	1,064 12 3
b. Refunds	155	..	5 8 5	..	...	1 11 6	1 14 8	49 12 5	258 15 3	317 14 3
c. Other sources	12,705	...	4,389 12 11	360 7 4	376 2 9	2,669 1 10	187 13 6	4,044 14 7	27 14 9	12,056 3 8
Total, Receipts ...	8,50,000	...	2,83,372 14 7	23,061 14 7	1,06,430 0 4	1,85,713 12 4	58,925 10 2	91,598 5 2	9,854 9 5	7,58,967 2 7

FORM NO. 58.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1891-92—(*continued*).

Budget heads.	Revised estimate for 1891-92.	Direction.	Kheri Division.	Bhira Division.	Bahrámghát Division.	Bahraich Division.	Gonda Division.	Gorakhpur Division.	Pilibhít Division.	Total.
	Rs.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a p
A.—CONSERVANCY AND WORKS.										
I.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FOREST BY GOVERNMENT AGENCY—										
a. Timber	1,96,309	...	1,34,563 15 7	175 4 9	16,921 14 3	1,579 0 1	3,497 11 4	2,434 4 1	2 0 0	1,59,114 2 1
b. Firewood and charcoal	41,656	...	...	4,929 9 2	4,266 8 10	4,072 5 5	7,834 10 11	10,096 14 11	1,775 5 7	32,975 6 10
c. Bamboos	...	...	...	..	...	...	...	...	...	...
d. Sandal-wood	...	...	...	..	...	..	...	...	...	...
e. Grass and other minor produce	22,000	...	...	953 0 6	...	10,821 7 5	2,177 14 10	...	35 9 6	13,988 0 3
II.—TIMBER AND OTHER PRODUCE REMOVED FROM THE FOREST BY CONSUMERS OR PURCHASERS.	9,200	...	1,802 0 7	1,177 0 3	...	2,144 6 2	1,759 5 0	2,727 3 9	1,417 2 3	11,027 2 0
III.—DRIFT AND WAIF WOOD AND CONFISCATED FOREST PRODUCE.	8,075	...	...	...	3,313 4 2	...	115 6 3	4,862 14 8	...	8,291 9 1
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT.										
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...	...	...	...	...
b Revenue from shared and private forests ...	..	...	...	...	...	...	...	...	...	...
V.—RENT OF LEASED FORESTS AND PAYMENTS TO SHAREHOLDERS IN FORESTS MANAGED BY GOVERNMENT.										
VI.—LIVE STOCK, STORES, TOOLS AND PLANT—										
a. Purchase of cattle	150	...	1,600 0 0	...	...	150 0 0	...	...	...	1,750 0 0
b. Feed and keep of cattle	4,130	...	1,721 6 4	120 10 1	666 11 7	678 3 7	92 15 7	595 12 5	311 5 8	4,187 1 3
c. Purchase of stores, tools and plant ...	3,525	...	755 8 2	192 15 6	762 13 9	546 3 0	175 6 8	324 6 0	15 7 0	2,772 12 1
VII.—COMMUNICATIONS AND BUILDINGS—										
a. Roads and bridges	23,410	...	9,238 5 10	293 15 4	97 9 3	2,642 9 5	999 5 11	93 0 0	265 2 9	13,630 0 6
b. Buildings	24,360	...	2,535 3 8	500 9 10	414 3 6	1,417 11 5	3,186 3 1	4,524 15 10	524 7 6	13,103 6 10
c. Other works	3,920	...	612 4 0	80 3 6	...	198 9 9	71 5 6	204 1 2	56 14 6	1,223 6 5
VIII.—DEMARCATION, IMPROVEMENT AND EXTENSION OF FORESTS—										
a. Demarcation	1,354	..	...	90 2 0	...	90 8 0	81 10 8	121 0 0	160 2 4	543 7 0
b. Compensation for land and rights ...	656	..	...	...	...	...	...	238 15 10	...	238 15 10
c. Surveys and working plans	90	...	385 14 2	2 0 0	...	41 13 0	...	...	...	429 11 2
d. Sowing and planting	2,500	...	291 14 3	22 8 6	...	...	47 8 3	442 6 10	...	804 5 10
e. Protection from fire	14,845	...	6,815 8 9	3,027 4 10	...	3,279 8 5	923 11 0	1,075 12 2	1,509 5 4	16,131 2 6
f. Other works	4,595	...	...	80 1 3	...	2,231 13 10	415 8 11	913 3 9	272 4 2	3,912 15 11
IX.—MISCELLANEOUS—										
a. Refunds	55	...	62 4 6	...	1,040 0 6	425 14 0	...	727 3 0	0 0 2	2,255 6 2
b. Law charges	960	...	...	...	1,266 0 6	...	..	210 15 10	...	1,477 0 4
c. Other charges	3,190	...	3,989 14 1	213 0 10	94 10 6	2,018 6 9	85 3 6	35 1 0	84 11 5	6,521 0 1
TOTAL, A.—CONSERVANCY AND WORKS ...	3,65,000	...	1,63,814 3 11	11,858 6 4	28,843 12 10	32,398 8 3	21,463 15 5	20,628 3 3	6,429 14 2	2,94,377 0 2

[Form No. 58.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS DURING 1891-92—(*concluded*).

Budget heads.	Revised estimate for 1891-92	Direction.	Kheri. Division.	Bhira Division.	Bahrámghát Division.	Bahraich Division.	Gonda Division.	Gorakhpur Division.	Pilibhít Division.	Total.
	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
B.—ESTABLISHMENT.										
I.—SALARIES—										
a. Conservators	15,000	16,485 15 1	...	...	...	...	...	...	106 7 3	16,592 6 4
b. Superior officers	58,850	...	8,391 8 1	4,000 0 0	3,109 10 10	6,600 0 0	3,709 10 10	9,064 13 5	4,001 10 11	39,167 6 1
c. Subordinate forest and depôt establishments ...	27,635	...	5,091 1 7	2,367 14 1	84 0 0	5,581 9 5	2,902 7 10	3,710 9 7	1,331 1 8	21,128 12 2
d. Office establishments	9,368	2,018 3 10	2,078 15 6	758 7 10	900 0 0	900 0 0	419 8 0	600 0 0	678 7 0	8,413 10 2
e. Deputation and special allowances	450	...	50 0 0	...	...	...	...	...	9 10 10	59 10 10
II.—TRAVELLING ALLOWANCES—										
a. Conservators	1,600	1,385 3 0	...	...	...	...	...	...	...	1,385 3 0
b. Superior officers	10,938	...	1,671 12 2	376 1 6	399 3 4	1,388 11 0	757 8 6	1,674 12 2	1,061 2 10	7,329 3 6
c. Subordinate forest and depôt establishments ...	3,089	...	1,056 1 4	480 9 3	16 0 2	765 6 6	852 1 10	239 13 2	75 2 11	3,185 3 2
d. Office establishments	2,089	491 7 11	545 10 6	249 1 4	131 5 0	232 4 8	152 11 4	25 1 4	216 5 11	2,044 0 0
III.—CONTINGENCIES—										
a. Stationery	224	6 5 0	18 8 9	6 2 9	24 3 3	14 10 9	9 11 3	28 13 6	9 10 6	118 1 9
b. Carriage of tents and records	1,040	290 8 5	71 6 0	63 4 1	...	257 14 6	131 0 0	76 6 10	50 2 8	940 10 6
c. Rents, rates and taxes	541	218 0 0	42 6 3	105 8 0	...	0 8 6	100 0 0	...	104 0 0	570 6 9
d. Pay of police guards	827	...	281 5 0	...	183 4 7	120 0 0	118 0 0	57 8 0	...	760 1 7
e. Official postage	1,020	361 9 6	127 11 0	61 1 0	180 12 6	117 9 6	77 7 6	132 7 6	90 15 6	1,149 10 0
f. Sundries	2,379	1,087 12 7	794 1 6	44 5 4	165 5 11	744 12 8	279 8 3	444 11 10	54 14 10	3,615 8 11
TOTAL, B.—ESTABLISHMENTS ...	1,35,000	22,345 1 4	20,220 7 8	8,512 7 2	5,193 13 7	16,783 7 6	9,269 11 4	16,045 1 4	8,389 12 10	1,06,759 14 9
GRAND TOTAL OF EXPENDITURE ...	5,00,000	22,345 1 4	1,84,034 11 7	20,370 13 6	34,037 10 5	49,121 15 9	30,733 10 9	45,673 4 7	14,819 11 0	4,01,136 14 11

CALCUTTA:
The 18th June 1892.

J. BRIDGNELL,
Chief Superintendent, Forest Accounts Branch.

[Form No. 59.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

ACCOUNT CURRENT FOR THE YEAR 1891-92.

Dr.

		Rs. a. p.	Rs. a. p.
To Cash Balance		...	30 6 7
„ *VIII.—Assessed Taxes—*			
Income Tax—Deductions from salaries		...	1,624 9 7
„ *Revenue as per Annual Summary, Form No.* 58		...	7,38,967 2 7
„ *Service Funds—*			
Civil Fund—Ordinary, Bengal		...	
Ditto Additional, Bengal		...	
Military Fund—Bengal		...	
Ditto Madras		...	
Military Orphan Fund—Bengal		...	
Uncovenanted Service Family Pension Fund—Bengal ..		1,312 10 0	
General Family Pension Fund		..	
Hindu Family Annuity Fund		...	
			1,312 10 0
„ *Deposits*		...	1,014 8 0
„ *Forest Cash Remittances—Local—*			
Forest cheques drawn		3,85,910 6 4	
Inter-Divisional Transfers		27,016 11 11	
			4,12,927 2 3
„ *Advances recoverable*		...	3,96,806 2 2
„ *Suspense*		...	
„ *Account Current (other Governments)—*			
Remittances from Government of India		2,287 4 11	
Ditto ditto Bengal		2,425 7 3	
			4,712 12 2
„ *Inter-Departmental Transfers—*			
Public Works Department ...	Rs. a. p.		
Oudh and Rohilkhand Railway (State Railway).	605 0 0		
Bengal, Northern and Tirhoot Railway (State Railway).	30,253 3 6		
Ordinary Branches	1,396 7 6		
Military Department	..		
Civil Department—		32,254 11 0	
Jail	98 0 0		
Survey of India Department ...	158 15 0		
Miscellaneous	301 6 4	558 5 4	32,813 0 4
Total		...	16,10,208 5 8

Cr.

		Rs. a. p.	Rs. a. p.
By Expenditure as per Annual Summary Form No. 58 ...		...	4,01,136 14 11
„ *Deposits*		...	221 4 0
„ *Forest Cash Remittances—Local—*			
Remittances to Treasuries		4,89,320 13 4	
Inter-Divisional Transfers		25,981 9 6	
			5,15,302 6 10
„ *Advances recoverable*		...	3,90,145 2 6
„ *Suspense*		...	
„ *Account current (other Governments)—*			
Remittances to the Government of India		1,49,804 10 6	
Ditto ditto Bengal		5,199 7 8	
			1,55,004 2 2
„ *Inter-Departmental Transfer—*			
Public Works Department ...	Rs. a. p.		
Bombay, Baroda and Central India Railway (Guaranteed Railway).	41,764 8 0		
Bengal, North-Western and Tirhoot Railway (State Railway).	29,919 13 11		
Rájputána and Malwa Railway (State Railway).	56,286 0 0		
Ordinary Branches	15,220 14 0		
		1,43,191 3 11	
Military Department ...	... ...		
Civil Department—			
Jails	4,715 9 9		
Miscellaneous	94 2 4	4,809 12 1	1,48,001 0 0
Cash Balance		...	397 7 3
Total		...	16,10,208 5 8

CALCUTTA:
The 18th June 1892.

J. BRIDGNELL,
Chief Superintendent, Forest Accounts Branch.

FOREST DEPARTMENT, N W PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 60.

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1891-92.

Division.	Particulars	Outstandings at commencement of year	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year	Remarks
		Rs. a. p	Rs a. p	Rs a p	Rs. a. p	Rs a p	
Direction ...	Timber, firewood, grazing and other minor produce ...						
Pilibhít ..	Ditto ditto ...	40 0 0	10,062 9 5	10,102 9 5	9,854 9 5	248 0 0	
Bhira ..	Ditto ditto	1,478 5 6	21,934 3 7	23,412 9 1	23,061 14 7	350 10 6	
Kheri	Ditto ditto .	*2,857 6 6	2,81,150 10 7	2,84,008 1 1	2,83,372 14 7	635 2 6	* Rupees 2,602-6-6 were written off by G. O No $\frac{800F}{3FIA-2}$ of 6th November 1891
Bahrámghát	Ditto ditto	50 10 7	1,31,652 2 10	1,31,702 13 5	1,06,430 0 4	25,272 13 1	
Bahraich ...	Ditto ditto	4,806 5 3	1,84,369 1 4	1,89,175 6 7	1,85,713 12 4	3,461 10 3	
Gonda	Ditto ditto	1,266 9 4	61,496 10 1	62,763 3 5	58,935 10 2	3,827 9 3	
Gorakhpur	Ditto ditto	2,845 14 2	91,481 1 2	94,326 15 4	91,598 5 2	2,728 10 2	
	Total	13,345 3 4	7,82,146 7 0	7,95,491 10 4	7,58,967 2 7	36,524 7 9	

NAINI TAL: *The 7th July 1892.*

S EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle

FOREST DEPARTMENT, N W PROVINCES AND OUDH, OUDH CIRCLE. [Form No. 61

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1891-92.

Division.	Department debtor			Department creditor			Balance due		Remarks.
	At commencement of year	Recoveries in cash and value of supplies and work done during the year	At close of year.	At commencement of year.	Payments made during year.	At close of year	To Department (Outstandings)	By Department (Liabilities)	
	Rs. a. p	Rs a p	Rs a. p	Rs a p	Rs. a. p	Rs a. p	Rs a. p	Rs. a p.	
Direction . .	.	1,441 1 10	1,441 1 10	16 15 5	1,776 9 10	1,793 9 3	352 7 5	...	
Kheri	0 0 1	2,19,675 11 3	2,19,675 11 4	40,511 0 10	2,19,107 2 8	2,59,618 3 6	39,956 9 6	14 1 4	
Bhira	...	16,872 15 1	16,872 15 1	958 6 4	19,044 13 4	20,003 3 8	3,130 4 7	...	
Bahrámghát	.	8,359 10 7	8,359 10 7	1,258 5 10	7,938 7 0	9,196 12 10	837 2 3	.	
Bahraich	0 5 9	60,289 8 9	60,289 14 6	4,645 1 10	59,602 9 6	64,247 11 4	3,957 12 10	...	
Gonda ..		32,023 14 1	32,023 14 1	7,422 14 0	30,034 0 9	37,456 14 9	5,433 0 8	...	
Gorakhpur ..		46,306 0 0	46,306 0 0	16,484 8 6	39,491 12 6	55,976 5 0	9,673 13 1	3 8 1	
Pilibhit ..	.	11,837 4 7	11,837 4 7	1,228 7 3	13,149 10 11	14,378 2 2	2,540 13 7	...	
Total	0 5 10	3,96,606 2 2	3,96 806 8 0	72,525 12 0	3,90,145 2 6	4,62,670 14 6	65,881 15 11	17 9 5	

CALCUTTA: *The 18th June 1892.*

J BRIDGNELL,
Chief Superintendent, Forest Accounts Branch.

[Form No 62

FOREST DEPARTMENT, N W PROVINCES AND OUDH OUDH CIRCLE

FINANCIAL RESULTS OF THE YEAR 1891-92

Division	Timber and other produce removed from the forests by Government Agency		Other revenue		Formation, protection and improvement of forests	Total		Remarks
	Receipts	Charges	Receipts	Charges	Charges	Receipts	Charges	
	Rs	Rs	Rs	Rs	Rs.	Rs	Rs	
Pilibhít	2,524	7,256	7,331	4,347	4,872	9,855	16,475	Direction Division charges amounting to Rs 22,345, distributed as follows —
Bhira Sub division	15,411	11,608	7,651	4,186	6,232	23,062	22,026	
Kheri with Bahrámghát	3,42,922	1,91,237	46,880	22,031	23,908	3,89,802	2 27,176	
Bahraich	22,467	29,627	1,03,247	10,002	13,571	1,85,714	53,260	
Gonda	30,210	20,924	28 726	6,349	5,945	58,936	33,218	
Gorakhpur	38,397	24,446	53,201	14,068	9,868	91,598	48,982	
Total	4 51,931	2,75,098	3,07,036	61,643	64,396	7,58,967	4 01,137	

	Rs
Pilibhít ...	1 (55
Bhira ...	1,655
Kheri .	4,965
Bahrámghát ..	4,138
Bahraich	4,138
Gonda	2,484
Gorakhpur	3,310
Total ...	22,345

The debits have been made as under :—

I—Timber and other produce removed by Government Agency

$$A\left(I + \frac{VI}{J} + \frac{VII}{J} + \frac{IX}{J}\right) + \frac{B}{2} + \frac{\text{Direction quota of charges}}{2}$$

II—Other revenue

$$A\left(II + III + \frac{VI}{J} + \frac{VII}{3} + \frac{IX}{J}\right) + \frac{B}{4} + \frac{\text{Direction quota of charges}}{4}$$

III—Formation, improvement and protection of forests.

$$A\left(\frac{VI}{J} + \frac{VII}{3} + \frac{VIII}{1} + \frac{IX}{3}\right) + \frac{B}{4} + \frac{\text{Direction quota of charges}}{4}$$

NOTE—It is impossible to make former arrangement of debits coincide with the facts of the working of the Circle, for instance under I only A1 expenditure was charged, and nothing for communications, establishments and direction The arrangement of debits noted above at least removes this objections

NAINI TAL
The 7th July 1892

S EARDLEY WILMOT,
Conservator of Forests, N. W. Provinces and Oudh,
Oudh Circle.

[Appendix A.

FOREST DEPARTMENT, N.-W. PROVINCES AND OUDH, OUDH CIRCLE.

PRODUCE REMOVED BY FREE GRANTEES AND RIGHT-HOLDERS, 1891-92.

Name of grantee	Description of produce.	Pilibhít.		Bhira.		Kheri.		Bahráinghát.		Bahraich.		Gonda.		Gorakhpur.		Total of each.	
		Amount.	Value	Amount	Value.	Amount.	Value.	Amount.	Value.	Amount	Value.	Amount	Value	Amount	Value.	Amount.	Value.
		No.	Rs.	No.	Rs	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs	No.	Rs.
Right-holders.	I.—Timber	237,779	33,579	...	..	...	..	..	..	...	...	...	...	.	...	237,779	33,579
	II.—Firewood .. .	181,316	4,671	...	...	...	...	...	...	...	..	...	...	...	...	181,316	4,671
	III.—Minor forest produce such as bamboos, bark, fruit and limestone.	..	2	...	...	...	...	..	...	...	...	...	...	...	...	...	2
	IV.—Grass grazing and leaf fodder .	..	6,068	...	..	...	...	...	...	...	...	...	...	...	...	...	6,068
	V.—Branches, leaves and vegetable mould for manure.	...	43	...	...	...	...	...	...	...	...	...	...	...	...	...	43
	Total . .	419,095	44,363	...	...	..	...	...	..	...	..	...	.	...	...	419,095	44,363
Concession by grant of Local Government.	I.—Timber	...	...	42,863	950	183,677	13,378	...	...	750,498	33,135	109,42	9,13	...	...	1,080,456	56,602
	II.—Firewood	..	..	79,119	320	175,828	3,091	...	...	17,900	113	12,451	9	...	...	285,301	3,620
	III.—Minor forest produce, such as bamboos, bark, fruit and limestone.	...	..	...	18	...	8,040	...	..	...	...	...	...	...	...	...	10,888
	IV.—Grass grazing and leaf fodder .	...	...	...	508	...	782	...	...	...	2,830	...	1,55	...	...	...	2,846
	V.—Branches, leaves and v getable mould for manure.	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2
	Total ...		...	121,982	1,798	359,505	25,291	.	..	768,393	36,078	115,87	10,79	...	...	1,365,757	73,956
Free grants under executive orders	I.—Timber	...	...	...	..	...	...	...	...	...	...	...	...	80	9	80	9
	II.—Firewood	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	III.—Minor forest produce such as bamboos, bark, fruit and limestone.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	IV.—Grass grazing and leaf fodder ...	...	...	...	.	..	...	...	...	...	...	...	..	...	...	...	...
	V.—Branches, leaves and vegetable mould for manure.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	..	..	...	...	...	..	...	...	...	...		80	9	80	9
	GRAND TOTAL ..	419,095	44,363	121,982	1,798	359,505	25,291	...	...	768,393	36,078	115,87	10,791	80	9	1,784,932	1,18,330

ABSTRACT FOR THE CIRCLE.

Description of produce.	To right-holders.		Under concession granted by Local Government.		By free grants under executive orders.		Total of each kind of produce.	
	Amount	Value	Amount	Value.	Amount.	Value.	Amount.	Value.
	No	Rs.	No	Rs.	No.	Rs.	No.	Rs.
I.—Timber	237,779	35,579	1,080,456	56,602	80	9	1,318,315	90,190
II.—Firewood	181,316	4,671	285,301	3,620	...	...	466,617	8,291
III.—Minor forest produce, such as bamboos, bark, fruit and limestone	...	2	...	10,888	..	...	...	10,890
IV.—Grass grazing and leaf fodder	..	6,068	...	2,846	.	...	...	8,914
V.—Branches, leaves and vegetable mould for manure	...	43	...	2	..	...	...	45

NAINI TAL:
The 7th July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests, N.-W. Provinces and Oudh, Oudh Circle.

APPENDIX B.

FIRE CONSERVANCY OPERATIONS, 1892.

1. The season was unfavourable. The winter was dry, the heat in spring excessive, the summer rains were delayed, and when they arrived were unsatisfactorily light.

2. There is an increase of 136,735 acres in the area attempted over that entered for last year in Form 51 according to detail given below :—

		Acres.
(a)	Sál forests in Pilibhít	7,784
(b)	" Bhira	47,900
(c)	" Kheri	51,063
(d)	Forests in Gorakhpur	29,088

The figures of last year have been corrected, so far as regards revision of area, so as to permit of comparison with the figures of this year.

3. The two statements below give circle and divisional details :—

Year of fire season.	Area in which protection was attempted. (i) By means of a regular system of fire lines and watchers	(ii) By the ordinary establishment under administrative orders and with the aid of villagers or levying expenditure on watchers, &c.	(iii) Total of (i) and (ii) as per Form 51.	Failures.	Area actually protected.	Cost of the operations of the year.	Cost. Per acre attempted.	Cost. Per acre protected.	Percentage of the area attempted to total area of the forest.	Percentage of failure to the total area attempted.
	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Pies.	Pies.		
1891 (i) ...	450,995	...	450,995	27,247	423,748	12,808	4·93	5·23	57·29	6·04
1891 (ii) ...	.	46,939	46,939	1,104	45,835	...	...	...	5 97	2 35
Total ...	450,995	46,939	497,934	28,351	469,583	12,808	4 93	5 23	63·26	5·69
1892 (i) ...	528,445	...	528,445	27,223	501,222	19,233	6 98	7 36	66·48	5 15
1892 (ii) ...	...	106,224	106,224	10,907	95,317	...	...	...	13·36	10 27
Total ...	528,445	106,224	634,669	38,130	596,539	19,233	6 98	7·36	79·84	6·00

Division.	Area attempted. Acres. 1892.	Area attempted. Acres. 1891.	Area attempted. Percentage of total area of divisions. 1892.	Area attempted. Percentage of total area of divisions. 1891.	Area protected. 1892.	Area protected. 1891.	Failures. Acres. 1892.	Failures. Acres. 1891.	Failures. Percentage of area attempted. 1892.	Failures. Percentage of area attempted. 1891.	Cost. 1892.	Cost. 1891.	Cost per area attempted in pies. 1892.	Cost per area attempted in pies. 1891.
					Acres.	Acres.					Rs.	Rs		
Pilibhít ...	51,519	43,735	52·69	45·13	26,248	34,047	25,271	9,688	49·05	22·15	1,334	1,401	4·97	4·15
Bhira ...	93,719	45,819	97 16	47·59	84,489	35,225	9,230	10,594	9·84	23·12	3,364	1,156	6 89	4·84
Kheri ...	123,054	71,691	67 94	39 39	123,054	71,691	...	...	0·00	...	8,128	4,840	12·62	12·96
Bahraich ...	157,760	157,760	74·56	75·42	157,620	157,700	140	...	0·08	...	3,986	3,278	4·85	3 98
Gonda ...	99,079	99,079	100·00	100·00	95,815	92,915	3,264	6,164	3·29	6·22	1,100	933	2·13	1·80
Gorakhpur ...	108,938	79,850	100·00	77·14	108,713	77,945	225	1,905	0·20	2·38	1,321	1,200	2 32	2·76
Total ...	634,669	497,934	70 84	63·26	596,539	469,583	38,130	28,351	6·00	5·69	19,233	12,808	5 81	4·93

(4 *a*) In *Pilibhít* the area attempted comprises the whole of the closed reserve, 42,673 acres, and a block of 8,846 acres in pargana Pilibhít, which was not specially protected this year, but will have this advantage next season. The protection of the restricted compartments in Puranpur was not attempted.

(*b*) There were 26 fires, of which 16 were in the area attempted and passed over 25,271 acres or one-half of the attempted area. Of these 16 fires 12 were in the closed reserve, the largest being one of 5,800 acres. The remaining 10 fires, which passed over some 6,000 acres, occurred in the restricted compartments of Puranpur, which, as stated above, were not protected by the Department.

(*c*) The burning of the attempted area is attributed (i) to the carelessness of the forest staff, (ii) to incendiarism, and (iii) to fire crossing from private lands and accident, in nearly equal proportions. In regard to (i) the Divisional Officer writes with much disfavour of the work of the protective staff, and it is very evident that punishment should be meted out to the individuals in fault. The constant occurrence of fires appears to have disorganized the working of the whole Division; there was most inordinate delay in reporting fires to the head office, but the matter is now under enquiry. In reference to (ii), although the fires were reported to the police, conviction is difficult and was only attained in one instance; whilst in reference to (iii) the rules issued in G. O. No. $\frac{349F.}{825-95}$, dated 2nd May 1891, appear to have had no effect, for, though private landowners may have wished to obey them, they cannot restrain their graziers.

(*d*) It was stated in paragraph 2 that no attempt was made to protect the restricted compartments in Puranpur, which alternate with the unrestricted compartments where the right of firing the forests has been conferred by the settlement. The attention of the Local Government is most earnestly requested to this matter, and comparison of the fire conservancy records of the Pilibhít Division for this and previous years with those of other Divisions is invited. It will be seen that the Forest Department in Oudh is not backward in extending fire conservancy operations nor in bringing them to a successful issue elsewhere; and the want of success in Pilibhít is mainly due to want of personal supervision and to the principles of fire conservancy not being recognised by the ruling authorities. The people are confused by firing being permitted and prohibited in adjoining areas and by rules which cannot be carried out either by the tenantry or by the Forest Department without an enormous outlay on protective measures, and the case as it now stands is impossible. The Department cannot prevent the tenantry from the exercise of their right to fire the unrestricted areas, but it cannot protect the restricted and closed areas if this is permitted. The tenantry commit a criminal offence if they, in their right, fire the unrestricted compartment without taking precautions that the fire shall not damage other State forests; but conviction is impossible, for the areas burdened with rights are not defined by villages, and it is impossible to assign any responsibility. Improved supervision has been provided for by forming the Pilibhít forest into a separate charge, but successful fire protection will still remain, as it is now, almost an impossibility so long as the tenantry are permitted to fire any State forests. It is hardly necessary to note the extreme undesirability of grazing, cutting, and firing being permitted over the same area, but it may be added in conclusion that the present position resembles much that of a farmyard in which are many hay stacks belonging to various owners, one of whom believes that it is to his advantage to destroy his property by fire and is in a position to do so without reference to his neighbours' welfare.

5. (*a*) *Bhira* shows an attempted area of 93,719 acres, of which 43,280 under special protection and 50,439 of open forest protected by the ordinary staff with the help of a few daily labourers. The latter area must come under special protective measures next season. In Bhira no firing of State forests is permitted, and the District Officer gives hearty co-operation in the work of protection. The results, therefore, are more favourable.

(*b*) There were 17 fires, of which only one of 35 acres occurred in the closed forests, the others, aggregating 9,195 acres, occurring in the open area. Of these 11 fires passing over some 6,000 acres came from private lands outside forest limits. The rules issued in G. O. No. $\frac{340F.}{825-66}$, dated 2nd May 1891, do not appear to have had any practical effect; four fires were lighted inside the forest, probably by graziers; one was attributed to workmen employed on the railway. There were no convictions.

(*c*) The results in Bhira are good considering the special difficulties of protection owing to the large number of men employed on railway works during the hot season. But the Divisional Officer is dissatisfied with the work of the forest staff and reports that neither the Sub-Divisional Officer nor any range officers were present at any of the fires. The delay in reporting individual fires to this office has prevented any action being taken in this matter up till now.; but enquiry will now proceed. It is urgently necessary that the areas burdened with concessions should be defined by groups of villages, and that the removal of free produce should not be permitted during the dry season.

6. In *Kheri* operations were an unqualified success. Fifty-one thousand nine hundred and sixty-three acres were added to the attempted area, and there were no casualties in the area of 123,654 acres attempted. The Divisional Officer is to be congratulated on a successful season, and the thanks of the Department are due to the Deputy Commissioner for the aid afforded. The cost of protection was high, but this is owing to the construction of permanent fire lines, which had this season to be done departmentally, whereas it would have been convenient, had time permitted it, to arrange for their construction by timber contractors at no cost under the sub-head.

7. In *Bahraich* the same area as in last year was attempted, *viz.*, 157,760 acres. Only three fires occurred in the Chakia-Charda range passing over 140 acres in all. One of these fires is attributed to carelessness of the establishment, who were fined, another to a native sportsman, and the third to malicious firing by a Nepálese villager. The two latter offenders escaped across the frontier. The results in Bahraich are excellent; the cost is nominally higher than last year, but this is due to the charging of clearing roads to AVIII(*c*) instead of to AVII(*b*). As noted in paragraph 39 of the annual report, the classification of roads and fire lines requires attention.

8. In *Gonda* the whole area of the Division, amounting to 99,079 acres, was attempted, and of this 52,140 acres were under special protection. Fifteen fires occurred passing over 3,264 acres. Of these one of eight acres is attributable to accident when burning fire lines, and one of 48 acres crossed from outside; five fires over an area of 1,935 acres were supposed to be maliciously lighted: the remainder are due to the carelessness of villagers and travellers. In fourteen fires caused by circumstances outside the control of the forest staff, eight convictions were obtained. The result of protection in Gonda is extremely good; it is satisfactory proof of the discipline and energy of the staff that so large an area should be successfully protected, and that the causes of failure should have been so promptly detected and the culprits punished. The exclusion of grazing on payment in the closed forests unburdened with rights will now be ordered, it having been found that this system leads to constant firing of the forests. The cost per acre was slightly higher than last season, but still remains extremely low.

9. In *Gorakhpur* 108,938 acres or the whole area of the Division was under protection. There were three fires over an area of 225 acres. One of these was caused by action in contravention of G. O. No. $\frac{340F.}{825-66}$, dated 2nd May 1891, and the offender has been prosecuted, a second came over from private forests, and a third occurred where a public road passes through the reserve. In the two latter cases enquiry did not result in discovering the offenders. The results of operations in Gorakhpur are excellent, especially when it is considered that the system of fire lines is inferior and their breadth inadequate. This matter will be taken up next season

in connection with the working plan for these forests. The cost per acre is, as usual, very low.

10. Excluding the operations in Pilibhít, the results of protective measures in the circle are extremely good; and the officers in charge of other Divisions and their subordinates are to be congratulated on the energy and good work which brought about these results in spite of the difficulties of the season. A statement giving the causes of forest fires by areas is appended :—

Year.	By the forest establishment when burning fire lines.		Fires which entered the forests by crossing exterior fire lines.		By workmen (when in forest employ) by accident.		By villagers, travellers, or soldiers by accident.		Fires caused by lightning or fire balloons.		Maliciously lighted inside the forests.		Cause unknown.		Total.	
	1		2		3		4		5		6		7		8	
	No.	Area in acres	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No	Area in acres	No	Area in acres.
1892 ...	6	8,563	17	9,292	7	298	10	5,346	..	...	14	14,631	...	...	54	38,130
1891 ...	2	9,057	6	12,382	5	701	...	...	...	...	12	3,708	7	2,503	32	28,351

and it is desired to place on record an acknowledgment of the aid afforded by the District Officers to the department.

DATED NAINI TAL :
The 23rd July 1892.

S. EARDLEY-WILMOT,
Conservator of Forests,
N.-W. P. and Oudh,
Oudh Circle.

No. 34.

FROM

J. S. GAMBLE, ESQ.,

CONSERVATOR OF FORESTS, SCHOOL CIRCLE,

N.-W. PROVINCES AND OUDH,

To

THE CHIEF SECRETARY TO GOVERNMENT,

N.-W. PROVINCES AND OUDH,

REVENUE (FORESTS) DEPARTMENT.

Dated Dehra Dún, the 21st June 1892.

SIR,

I HAVE the honor to submit the Forest Administration Report of the School Circle for the year 1891-92.

I have the honor to be,

SIR,

Your most obedient servant,

J. S. GAMBLE,

Conservator of Forests, School Circle,
N.-W. Provinces and Oudh.

SCHOOL CIRCLE REPORT.

Para.	Contents.	Page.
	CHAPTER I.—AREA AND BOUNDARIES.	
	1.—Area.	
1—2	Area of the circle and changes in area during the year	1
3	Discrepancies in present Jaunsar reserves with those originally notified ...	ib.
4	Information regarding forest and pasture lands	ib.
	2.—Settlement.	
5	Forests under settlement, proposals for reservation	2
6	Mussoorie municipal forests	ib.
	3.—Boundaries.	
7	Condition of boundary marks	2
8	Boundaries in Jaunsár	ib.
9	Cost of demarcation and disputed boundaries	3
	CHAPTER II.—SURVEYS, WORKING PLANS, AND PLANS OF OPERATIONS.	
	1.—Surveys.	
10	Cost of operations	3
	2.—Working Plans.	
11	Working plans in progress—preparation of Working Plan for Sahárunpur forest	3
12	Ditto for other forests in Jaunsár not required	ib.
	Existing Working Plans.	
13	Dehra Dún Working Plan	3
14	Jaunsár ditto	4
	3.—Annual Programme of Work.	
15	Results	4
	CHAPTER III.—PROTECTION AND IMPROVEMENT.	
	1.—Establishment.	
16	Charge of the circle	4
	Divisional charges	5
17	Distribution and utilization of grants for establishments	ib.
18	Division of the circle into executive charges	ib.
19	Charge of ranges	6
20	Personnel of the subordinate staff	ib.
21	Ditto office staff	ib.
	2.—General prosecution and breaches of Forest Law.	
22	Prosecution of forest offences	6
	3.—Fire Conservancy.	
23	Remarks on fire conservancy (*vide* Appendix I)	7
	4.—Grazing.	
24	Areas open and closed	7
25	Heads of cattle grazed	ib.
26	Grazing dues	ib.
	5.—Natural Reproduction.	
27	General remarks	7
	6.—Artificial Reproduction.	
28	Expenditure on plantations and works in Dehra Dún Division	8
29	Works in Sahárunpur Division	ib.
30	Ditto Jaunsár ditto	ib.
	7.—Works of Improvement.	
31	Climber cutting	8
32	Cutting back badly grown and damaged trees	9
33	Girdling and thinning, Dehra Dún Division	ib.
34	Ditto ditto, Jaunsár ditto	ib.

Para.	Contents.	Page.
	8.—Roads and Communications.	
35—38	General sketch of work done on roads in Divisions	9—10
	9.—Buildings.	
39—42	General sketch of work done in Divisions	11
43	Return of buildings in the circle	ib.
44	Forest inspection houses	ib.
45	Expenditure on buildings	ib.
	CHAPTER IV.—YIELD AND WORKING.	
46	Summary of yield and working of the circle, Code Forms Nos. 54—57 ...	12
47—53	Yield and working of the Dehra Dún Division	12—13
54	Ditto ditto Sahárunpur ditto	13
55—56	Ditto ditto Jaunsár ditto	14
57	Timber trade of the Jumna	ib.
58	Drift operations	ib.
59	Produce removed by free grantees	15
60	Resin operations	ib.
61	Tar dittto	ib.
62	Other products	ib.
	CHAPTER V.—FINANCIAL RESULTS.	
63	Main financial results	16
64	Receipts and charges in each Division	ib.
65	Ditto ditto Dehra Dún Division	ib.
66	Ditto ditto Sahárunpur ditto...	ib.
67	Ditto ditto Jaunsár ditto	ib.
68	Financial results of the year	17
69	Revenue received and outstandings on account of revenue	ib.
70	Outstandings and liabilities on account of contractors and disbursers ...	ib.
71	Value of the year's transactions	ib.
	CHAPTER VI.—GENERAL.	
72—74	Services of the staff...	17—18
75	Office establishments	18
76	Health of the staff	ib.
77	Levelling of the Sahéranpur raus	ib.
78	Rainfall observations	ib.
	Annual Statements, &c.	
	Appendix I.—Notes on fire conservancy	i—v
	Form No. 49.—Areas of forests	vi—ix
	" " 50.—Forest offences	ix
	" " 51.—Areas of forests protected from fire	x—xii
	" " 52.—Area of plantations	xiii
	" " 52A.—Area of cultural operations	xiv—xv
	" " 54.—Outturn of timber and firewood with comparative abstract ...	xvi—xvii
	" " 55.—Outturn of minor produce with comparative abstract ..	xviii
	" " 56.—Sale of timber and other produce by Government agency ...	xix—xxi
	" " 57A & B.—Value of timber, &c., in sale depôts and of live and dead stock. Abstract of stock.	xxii—xxiv
	" " 58.—Comptroller-General's summary of revenue and expenditure ...	xxv—xxvi
	" " 59.—Account current	xxvii
	" " 60.—Revenue receipts and outstandings of revenue	xxviii
	" " 61.—Outstandings from contractors and disbursers	ib.
	" " 62.—Financial results of the year	ib.

ERRATA.

Forest Administration Report of the School Circle for 1891-92.

Page 12, para. 40 —

No 17, *for* "209,373" *read* "258,090" and *for* "27,177" *read* "75,894."
" 18, " "1,88,566" " "2,34, 874" " " "43,295" " "89,603"
" 31, " "488" " "541" " " "60" " "113"
" 32, " "142" " "197" " " "41" " "98."

" 14, " 55, at end *insert* "132,428 metre gauge sleepers were sold during the year to the Rajputána-Malwa Railway under the railway contract of 1889—1892"

" 16, " 63, in the last column of the schedule, Receipts, *for* "3,02,904" *read* "4,39,272," and Surplus, *for* "1,15,247" *read* "1,61,555," and Percentage, &c, *for* "70 67" *read* "63 22," and in the 2nd line after the schedule omit the word "second" and the words "being next to that of 1889-90" Also omit from the 3rd line the sentence "If the railway . . on record"

" " 64, in the 4th and 10th columns of the schedule—

Jaunsár, *for* "2,70,704" *read* "3,17,012," and *for* "1,00,002" *read* "1,46,310"

Total, *for* "3,02,904" *read* "4,39,272," and *for* "1,15,247" *read* "1,61,555"

" 17, " 68, lines 5 and 6, *for* "55,450" *read* "1,01,758," and omit sentence "which would . of 1889-90"

" " " 71, *for* "1,15,247" *read* "1,61,555," *for* "1,10,837" *read* "62,120," *for* "2,35,043" *read* "2,32,634," and *for* "2,25,421" *read* "2,28,012"

" XIX.—Form No 56, under "Removed by purchasers from Depôts" —

Metre gauge deodar sleepers, *for* "103,973" *read* "136,451," and *for* "155,959" *read* "204,676"

Total of each head *for* "120,591" *read* "153,069," and *for* "171,204" *read* "219,921."

" XX —Form No 56, under "Balance at close of the year" —

Jaunsár Division, *for* "143,202" *read* "110,724," and *for* "225,386" *read* "176,669"

Jaunsar Division, total, *for* "177,057" *read* "144,579," and *for* "270,382" *read* "221,665"

Total balance, *for* "184,422" *read* "151,944," and *for* "281,104" *read* "232,387"

" XXI —Form No 56, Abstract—Timber, &c —

Removed by purchasers, &c, *for* "171,204" *read* "219,921"

Balance at close, &c, *for* "281,104" *read* "232,387"

" XXII —Form No. 57A, Jaunsár Division —

Metre gauge sleepers, *for* "143,202" *read* "110,724," *for* "225,386" *read* "176,669," *for* "214,808" *read* "166,086," and *for* "77,308" *read* "28,591"

Total, *for* "2,70,841" *read* "222,124," and *for* "1,10,478" *read* "61,761"

Grand Total, *for* "2,72,691" *read* "2,23,974," and *for* "1,11,984" *read* "63,207"

Net difference, *for* "1,10,837" *read* "62,120."

" XXIV —Abstract stock account :—

On hand at close of the year

Jaunsár Division, Timber, *for* "270,882" *read* "221,665," and *for* "2,44,434" *read* "1,95,717"

Total, Timber, *for* "281,104" *read* "232,387," and *for* "2,46,261" *read* "1,97,514"

Total, Jaunsar, *for* "403,354" *read* "354,637," and *for* "270,841" *read* "222,124"

Total—Total, *for* "424,417" *read* "365 734," and *for* "2,72,691" *read* "2,23,974"

Grand Total, Jaunsár, *for* "321,218" *read* "2,72,501,"
" " Total " "3,79,188" " "3,21,471"

Increase or decrease, &c —

Jaunsar, Timber, *for* " + 87,934" *read* " + 39,217"
Total " " " + 89,311" " " + 40,594."
" Jaunsar " " + 1,09,437" " " + 60,720"
" Total " " + 1,10,837" " " + 62,120"

Dead stock, &c —

Jaunsar, *for* "29" *read* "293"
Grand Total, *for* "100,730" *read* "61 013"
" " " "1,12,778" " "64,061"

Page XXV.—Form No. 58, Receipts:—

Jaunsár, I(a) timber, *for* "1,85,317-8-10" *read* "2,31,626-1-10."

Total „ „ „ "1,87,432-2-4" „ "2,33,740-11-4."

„ receipts, Jaunsár, „ "2,70,704-0-0" „ "3,17,012-9-6."

„ „ Total „ "3,92,963-11-8" „ "4,39,272-4-8."

„ XXVII. „ „ 59. Revenue as per annual summary, *for* "3,92,963-11-8" *read* "4,39,272-4-8."

Inter-Divisional transfers, Bombay, Baroda, and Central India Railway, *for* "1,59,042-15-0" *read* "2,05,351-8-0."

Inter-Divisional transfers, total, *for* "1,90,501-9-4" *read* "2,36,810-2-4."

Total, *for* "8,42,225-4-8" *read* "8,88,533-13-8."

„ Cr. *for* "8,42,225-4-8" *read* "8,88,533-13-8."

„ XXVIII. „ „ 60. Jaunsár, *for* "2,78,324-0-7" *read* "3,24,682-9-7," *for* "3,03,911-13-8" *read* "3,50,220-6-8," and *for* "2,70,941-14-6" *read* "3,17,250-7-6."

Total, *for* "3,84,135-12-5" *read* "4,30,444-5-5," *for* "4,41,396-10-0" *read* "4,87,705-3-0," and *for* "3,93,751-9-8" *read* "4,40,060-2-8."

62, Jaunsár, *for* "2,07,477" *read* "2,53,785," and *for* "2,71,167" *read* "3,17,475."

Total, *for* "2,13,037" *read* "2,59,345," and *for* "3,92,964" *read* "4,39,272."

SCHOOL CIRCLE, NORTH-WESTERN PROVINCES AND OUDH, ANNUAL PROGRESS REPORT OF FOREST ADMINISTRATION FOR THE YEAR 1891-92.

CHAPTER I

Area and Boundaries.

1.—Area.

THE area of the forests of the circle has undergone but little change during the year. Form No. 49 shows an increase of 6 acres under "Reserved Forests," due to the inclusion of the Rikhikesh Depôt in Dehra Dun Division, which was gazetted as Reserved Forest in 1879, but never before brought on the list. It also shows an increase of 33 acres under "Unclassed Forests" in the Dehra Dun Division, due to the inclusion of the camping grounds acquired by purchase at Bulawála, Lachiwála, and Thano in past years. These camping grounds have not before been included in the return, though it seems quite right that they should be. In the Dehra Dún Division also, 925 acres, being the area of part of the Nagsidh forest, were excluded under orders of Government, as it was found that the original notification of the area rendered it dependent on the boundaries of neighbouring estates, and that if the claims of those estates were satisfied little of the forest would be left.

2. These changes reduce the area to—

	Acres.	
Reserved forests	460,890	
Leased ditto	49,740	
Unclassed ditto	8,927	
Total ...	519 557	or 812 square miles.

on 31st March 1892. The exclusion of the five detached portions of the Pathri forest referred to last year has not yet been settled. That of an area of 94 acres proposed to be ceded to Messrs. Powell in the Bádshahibagh and Khaironwála blocks of the Saháranpur Division has, it is understood, been ordered, but no notification has yet issued.

3. The Superintendent of Forest Surveys has drawn attention to the great difficulty that he experiences in tracing on the maps the areas referred to in Notification No. 408A of August 31st, 1878, in which the boundaries of the Jaunsár forests were gazetted. The Conservator has also in vain endeavoured to make them out. He is not quite sure whether the re-notification suggested by Mr. Reynolds would be legal unless an inquiry under section 34 were ordered under a Forest Settlement Officer. The forests of Jaunsár are full of small areas of village land called "chaks," but no inquiry or settlement of them has ever been made in the manner prescribed by the Act, though their gradual demarcation and settlement is being done by the Department as provided in the Working Plan. The difficulty in the original notification was of course due to the want at the time of its first publication under Act VII of 1865 of good maps such as we now possess.

4. The orders of the Government of India in para. 3 of their Review No. 138F. of 5th February 1892, requiring full information regarding all forest and pasture lands still at the disposal of the State, are being attended to, but there has hardly been time to collect full information. In Dehra Dún, the Conservator believes that the present returns show all the available lands except some areas of hillside scrub forest in Malkot iláqua. In Jaunsár, there is of course a good deal of waste land outside the reserved forest, but the better forest portion was made "3rd class forest" by Mr. Ross' settlement in 1874 and handed over to the villagers for their own use, but with no right to sell or alienate, or left as grazing land. The area of uncultivable land and

3rd class forest outside the reserves was given by Mr. Ross as 165,575 acres. The area of Jaunsár is 283,097 acres, and the population in 1874 was 40,000, so that when it is considered that, besides the above, large grazing and timber concessions are also given in the reserved forests, the settlement must be said to have been very liberal indeed. For Saháranpur, accurate information has not yet come to hand, but in the Settlement Report of 1870 the area of unassessed land outside the Siwaliks is given as 234,583 acres, of which a large proportion has probably since then come under assessment and cultivation. The subject will receive full attention during the current year: meanwhile the Conservator hopes to receive from Government the orders of the Government of India in Circular No $\frac{17}{105}$F. of 15th July 1891, regarding the sub-division of waste lands between "forests," "fuel and fodder reserves," and "pasture lands."

2.—Settlement.

5. The enquiry regarding the Malkot forest, which, it is regretted, was last year erroneously given as under section 4 of the Act, when in reality it was under section 34, was completed during the year. The boundaries were re-gazetted by G. O. No. 193F., dated 2nd March 1892, which described the forest as it really is, in two separate blocks—Paled and Maidan. By Notification No. 196F., dated 2nd March 1892, under section 4 of the Indian Forest Act, the Superintendent of the Dún has been appointed Forest Settlement Officer of three blocks of "semla" producing forests, two blocks of "chír" forests, and three blocks of fuel forests in Malkot, but it is understood that no proclamation under section 6 of the Act has as yet been issued by him. These blocks have been temporarily demarcated.

6. The forest lands under the Mussoorie Municipality were carefully examined by Mr. N. Hearle and then in part by the Conservator and the result communicated to the Commissioner of Meerut and the Government. The Conservator hopes that some means may be adopted whereby these lands or the best parts of them can be brought under management and preserved for the future supply of that important hill station, and the improvement of the appearance of its hills, and especially its southern slopes upon which are situated the most important block, Kiarkuli. The late Commissioner (Mr. A. J. Lawrence, C.I.E.) was much interested in the subject.

3.—Boundaries.

7. In the Dehra Dún Division, Mr. Grenfell, Assistant Conservator, completed the boundary records during the year. They require to be carefully gone over and compared with the map, and this will now be done.

Progress has been made in the renewal of boundary pillars in Saháranpur; and 146 new masonry pillars were erected in Dehra Dún. In the latter Division the exclusion of part of the Nagsidh forest and the abolition of some quite unnecessary marks reduces the number to be maintained. Good progress was made in the digging of boundary ditches, of which we have 11¼ miles, part of which is on the Karwapani-Jumna boundary road, now under construction in accordance with Working Plan orders.

8. From Jaunsár the Divisional Officer reports that in para. 3 of their Review of last year's report the Government have misunderstood the condition of affairs. He says: "As far as he understands the remarks, the impression made upon Government was that only 90 miles which represented the length of boundary paths actually cut were *properly demarcated*, whereas about half the remainder of the outside boundaries are quite sufficiently demarcated by conspicuous boundary pillars, ridges, roads, and streams, which arrangement is quite sufficient for all practical purposes." The Conservator regrets to say that he has found the Jaunsár demarcation confusing, and if it is so to him it must be worse to outsiders. There are excellent pillars, usually in excellent repair, but the lines between them have not been cleared, though there are fire-protection lines which consist of zigzag paths which only rarely agree with the boundary as mapped. These paths are useful, no doubt, but in his opinion the boundary lines should be cleared as well. He will take up the matter more definitely, as requested by Government last year, and give precise instructions.

9. The following is the usual return of demarcation as given by Divisional Officers :—

Division.	Pillars.	Boundary lines.	Cost of maintenance.	Pillars requiring repairs at close of the year.
		Miles.	Rs.	
Dehra Dún	904	218	1,334	313
Saháranpur	621	132	934	42
Jaunsár	2,115	121	1,872	421
Total ...	3,640	471	4,140	776

The disputed boundary between the Jubal State and the Raiengarh jághír is still pending; as is another one regarding the ownership of some forest land near Chachpur peak, under consideration by the Superintendent of the Simla Hill States.

CHAPTER II.

1.—Surveys.

10. Maps of the Korwa forest in Jaunsár and of the Naintwar and Datmir leased forests in Tehri-Garhwál were received from the Superintendent of Forest Surveys. The remainder of the Tehri-Garhwál maps as well as that of the Karumba forests in Jaunsár are awaited. The expenditure for the survey year (October 1890 to September 1891) was Rs. 360, plus Rs. 13-8-0 on the enlargement of the Korwa map.

2.—Working Plans.

11. No new plans were in hand. The transfer since the end of the year of the Divisional Officer of Saháranpur (Mr. L. Mercer) may unfortunately prevent his drawing up the Working Plan for that Division, which is so much needed, next winter season. Endeavours will, however, be made to get information together for its preparation as soon as circumstances can permit. It is badly wanted, for the several coppice areas are as yet indefinite, the bamboo arrangements are unsatisfactory, and the sale of standing trees, though probably well within the annual yield, is still unregulated by any definite valuation.

12. The only other forests in the circle for which no Working Plan exists lie in the Bawar and Deogarh Ranges of Jaunsár, and in the Barasti forests of Deoban Range. These should be done when opportunity admits, but they are not very important, and possibly it may be best to wait for the revision of the Working Plans of Deoban, Mundali, and the Chír forests and then incorporate the whole in one plan for Jaunsár.

Existing Working Plans.

13. *Dehra Dún.*—The Inspector-General of Forests and Superintendent of Working Plans have during the year called the attention of Government to certain points in which this Working Plan has not been fully attended to, and the deviations were explained and accepted by Government. In its main provisions, the plan has been carefully adhered to, and in its minor provisions endeavour is being made to carry them out or obtain sanction to alterations. The Conservator has proposed new regulations for the working of the bamboo forests and the planting of bamboo; also the abandonment of the Khairi coppice area, which has turned out a failure financially and proved to be not only much smaller than was supposed, but in reality to be scarcely more than a swampy canebrake. He and the Divisional Officer have proposed a revised plan for the Nichla-Suswa coppice and a new one for the valuable mixed forests near Lachiwála, for which the Divisional Officer (Mr. Hearle) has prepared a well considered small Working Plan to be supplementary to the General one. The question of altering the system of working of the Thano Working Circle, where *improvement* thinnings are rather out of place, is under discussion.

14. *Jaunsár.*—Similar reports were also called for and submitted as regards the three Working Plans of this Division, and the Conservator is engaged in endeavouring to arrange to return everywhere to the original arrangements. This will not be difficult as regards the cuttings and the works of "cleaning" and "thinning," but the plantations are so dependent on the years of good seed that it is difficult to carry out exactly pre-arranged details.

Deoban Working Plan.

(1) *Karamba Working Circle.*—The *fellings* in Konain compartment 4 have been begun. The *thinning* and *girdling* works in Karamba have exceeded the Working Plan arrangements, as the 150 acres laid down for 1892 were done as well as the 200 acres of 1891, funds and skilled labour admitting.

(2) *Lokandi Working Circle.*—The *cleanings* in Marauwa Block were finished, and proposals are now being prepared for doing the work, as recommended in the Working Plan, in five years instead of ten The Conservator considers that in the important work of cleaning kail over deodár, 10 years is much too long a period for returning to the same place. The Bodyar *planting* work was found by the Conservator to be desultory, and he is submitting proposals for return to Working Plan orders. The Asmari fenced area is nearly ready.

(3) *Deoban Working Circle.*—The Amlokri Block has been closed to fire; that of Hajawa still remains.

(4) *Ban Oak Working Circle.*—Planting in Korwa has had to be deferred from want of plants.

(5) *Pandawa Working Circle.*—There being no demand for lime burning fuel, no fellings were made.

(6) *Kálsi Working Circle.*—Five acres in compartment 3 were sold to a contractor; and 35 acres of compartment 7 cut for Chakráta supply. This is satisfactory, and we hope soon to catch up the Working Plan.

Mundali Working Plan.

No *thinning* or *girdling* was done, as the works were already beyond the prescription. *Planting* was continued in 5 acres of compartment 9.

Chír Forests Working Plan.

A new scheme of fellings was sanctioned by Government during the year, but the Conservator regrets that he made an error in his proposals, since found out. The Divisional Officer proposed to alter the annual yield from one "by area" to one "by number of trees," and the Conservator sent on the scheme insufficiently considered. After an inspection of the forests, he is obliged to say that he does not entirely approve of the new scheme and considers that of the Working Plan "by area" to be really better, though a double check in the shape of a maximum number of trees could easily be prescribed as suggested by the Inspector-General.

Tehri-Garhwál Working Plan.

Fellings were continued in Patangni, Kamari, Partil, and Temple blocks, where there was still a large reserve of over mature trees with a splendid advance growth. The workings are therefore still one year behind the Working Plan. *Girdlings* were done in Kangagad and Morira blocks in advance of the Working Plan, funds and labour being available. The *planting* works in Pipal and Lohasu were small only for want of seed.

3.—Annual Programmes of work.

15. These have been generally carried out and excellent work done, but the Conservator would have liked to see rather more attention paid to some of his suggestions on the Jaunsár works by the Divisional Officer.

CHAPTER III.

Protection and Improvement.

1.—Establishment.

16. The charge of the circle was held by Mr. J S. Gamble, M.A., throughout the year.

The Divisional charges were held—

Dehra Dún Division.

Mr. N. Hearle, Deputy Conservator, the whole year.

Saháranpur Division.

Mr. L Mercer, Officiating Deputy Conservator, the whole year, except from 1st July to 30th September 1891, when he was on privilege leave and Mr. A. P. Grenfell acted for him.

Jaunsár Division.

Mr E. McA Moir, Deputy Conservator, the whole year.

Mr. A. P. Grenfell, Assistant Conservator, was employed in the Dehra Dún Division in the preparation of the boundary record from 1st April to 30th June 1891, and again from 1st October 1891 to 17th March 1892, when he proceeded to the Jaunsár Division.

17. The grants for the Executive, Protective, and office establishments were distributed and utilized as follows :—

Division.	Executive and Protective establishment							Office establishment.						
	Permanent sanction per annum	Temporary sanction per annum.	Total sanction as it stood on 31st March 1892.	Actual charges.				Permanent sanction per annum.	Temporary sanction per annum.	Total sanction as it stood on 31st March 1892.	Actual charges			
				1890-91.		1891-92.					1890-91.		1891-92.	
	Rs.	Rs.	Rs	No	Rs.	No.	Rs.	Rs.	Rs.	Rs	No.	Rs.	No.	Rs.
Direction ...	...	...	..	...	...	...	...	2,868	1,468	4,336	14	3,661	16	4,232
Dehra Dún ...	9,118	607	9,725	66	9,503	71	9,121	2,256	352	2,608	15	2,436	16	2,574
Saháranpur ...	7,048	158	7,206	71	7,067	62	7,147	1,524	156	1,680	13	1,569	10	1,687
Jaunsár ...	7,878	1,053	8,431	51	8,085	49	8,429	2,148	729	2,877	15	2,555	19	2,988
Unallotted ...	1,200	12	1,272	...	...	...	...	120	458	578	...	...	...	...
Total ..	24,804	1,830	26,634	188	25,255	182	24,697	8,916	3,163	12,079	57	10,221	61	11,481

The savings in the Executive and Protective establishments are principally due to the promotion and subsequent transfer of two of the senior Forest Rangers of this Circle. The increase in the office establishment is due to the promotion of certain members sanctioned during the year, and also to the entertainment of an extra draughtsman in the Conservator's office for a portion of the year.

18. The circle is divided into the following executive charges :—

Division.	Area.	Number of ranges.	Average area per forest range.
	Sq. miles.		Sq. miles.
Dehra Dún	289	6	48
Saharanpur	295	3	98
Jaunsár	229	5	46

No orders have yet issued on the improvement of the position of officers in charge of Ranges, one Range in Dehra Dún, one in Saháranpur, and two in Jaunsar being still held by Foresters. The transfer of two of the most experienced Forest Rangers is also severely felt. The Conservator is bound to express his satisfaction at their well deserved promotion, but cannot think that promotion should necessarily mean transfer. The omission to give a share of the Extra Assistant Conservator staff to the School Circle is scarcely fair on that Circle, and the Conservator hopes that in time his many recommendations on the appointment of one to work under the Divisional Officer in

Jaunsár will receive some recognition. The School Circle, which trains the Provincial staff for nearly the whole of India ought to have not only the best available officers, but also a full staff and the best subordinates if its forests are to be the models of management they should be.

19. The 14 ranges were held as follows at the close of the year :—

	Rs.	Number of ranges.
Forest Ranger, 2nd grade	120	1
Ditto, 3rd "	100	1
Ditto, 5th "	60	2
Ditto, 6th "	50	6
Forester, 2nd "	35	2
Ditto, 3rd "	30	1
Ditto, 5th "	20	1

The sanctioned staff of Forest Rangers is 10, as detailed below :—

	Rs.	Number sanctioned.
Forest Rangers, 2nd grade	120	1
Ditto, 3rd "	100	2
Ditto, 5th "	60	3
Ditto, 6th	50	4
		10

Promotions are being delayed in consequence of the new orders which give the control of the provincial staff promotions and appointments to the Government, necessitating the amalgamation of the lists of the three circles. The Conservator regrets that the Government of India should have taken from him the power of promotion of his Forest Rangers, for such officers are sure to work better under the immediate eyes of the officer who has power to promote them than when all he can do is to make a report to Government and they have to take their chance with the officers of other circles of whom they perhaps know nothing at all.

20. The subordinate staff is working well generally, best in Jaunsár. The Divisional Officer reports an improvement in energy among the forest guards in Dehra Dún, while on the other hand the Saháranpur Divisional Officer considers that those of his Division are too much apt to confine their inspections to the Khara-Hardwár road. This will be seen to.

21. The office staff is well reported on, but is weak in Jaunsár where account work is heavy. The Conservator regrets that his proposals for its improvement were only accepted in some small details.

2.—General Protection and Breaches of Forest Law.

22. Form No. 50 gives the prosecutions for forest offences during 1892-93. The number taken into Court was 13 as against 18 last year; 2 cases were pending at the close of the year. In 9 cases out of 11, *i.e.*, 88 per cent., convictions were obtained. The most important case was the Gunthala sleeper theft case, referred to in last year's report. The prosecution was successfully conducted and 66 men convicted, three of whom were sentenced to three months' imprisonment. The total amount of fine imposed was Rs. 778, of which Rs. 500 was to be paid to the Forest Department. But the result of this prosecution was not, however, considered by the Chief Court of the Panjáb as quite satisfactory, three men having been acquitted on appeal, and it is doubtful whether the other sentences in the case will be upheld if appealed against. The other cases call for no special remarks, except that of Kanhya Lal, Forester, in the Saháranpur Division, charged with embezzlement and sentenced to six months' imprisonment and a fine of Rs. 50. The Conservator regrets to report that Ram Chandra, Forest Guard, who was assaulted in the attempt to arrest two men who were illicitly cutting grass, died from the effect of the wounds inflicted. One of the assailants has been arrested and sentenced by the Sessions Judge, Saháranpur, to transportation for life. The number of cases disposed of under section 67 of the Forest Act was 86 out of 92 sent up for orders. They were all trivial ones.

3.—Fire Conservancy.

23. The subject will, as usual, be treated in a separate report after the close of the fire season, which up to date of writing (May 24th) has been a bad one, several fires having occurred in all Divisions.

The Conservator is engaged in considering measures to be adopted for reducing the area of reserved forest land in Jaunsár allowed to be burnt, or at any rate for regulating the burning so as to minimize its evil effects, without too greatly interfering with old practices and prejudices of the country.

4.—Grazing.

24. The following statement shows the areas open and closed during the year :—

Division.		Total area.	Area closed to grazing	Percentage of total area closed.	Remarks.
		Acres.	Acres.		
Dehra Dún		184,540	43,363	23·49	Of this area, 21,541 acres are closed from February to July.
Saháranpur		188,504	63,714	33·79	
Jaunsár		146,447	44,810	30·59	
Total for the Circle	1891-92	519,557	151,887	29 23	
	1890-91	520,514	151,624	29·12	

The increase in the area closed is in the Saháranpur and Jaunsár Divisions, where certain areas worked as coppice have been closed.

25. The actual head of cattle grazing in the open forests of the Dehra Dún, Saháranpur, and Jaunsár Divisions is as follows :—

	Acres per head.		Head of cattle.	
	1890-91.	1891-92.	1890-91.	1891-92.
Dehra Dún	4 1	4·15	34,699	34,034
Saharanpur	1·88	1 91	66,455	65,546
Jaunsár	2·45	2 45	42,531	*41,531

* Estimate.

though the value of the return is doubtful in consequence of the difference of length of the periods during which different cattle use the forests. It might be better to reduce the number to a unit of, say, so many head per month and to separate the three seasons of winter, hot weather, and rains; but it would not be very easy to obtain the information.

26. *Grazing dues.*—The past and present receipts on this account compare as follows :—

	Receipts.	Per acre.	Outstanding on 31st March.
	Rs.	Anna.	Rs.
1889-90	27,782	1·24	29
1890-91	18,679	·80	8,315
1891-92	34,189	1·40	405

The large increase is due to outstandings of previous year, amounting to Rs. 8,276, having been realized and credited during the year. Rupees 224 and Rs. 271 were outstanding in the Dehra Dún and Saháranpur Divisions respectively at the close of the year.

New grazing rules are badly wanted, as explained in last year's report.

5.—Natural Reproduction.

27. In Jaunsár, natural reproduction is everywhere satisfactory where fire is excluded. The splendid deodár reproduction at Deota, that of blue pine in Lokandi and

Lambatach, and that of chír pine in Khunigadh are especially noticeable. Where fire is allowed, there is, of course, nothing. In Dehra Dún it is also excellent in areas closed to grazing; and in Saháranpur the effects of continued fire protection on the curious peaks and ridges of the Siwalik country are very marked. The Saháranpur Divisional Officer also comments on the good reproduction in "rau" beds, where crops of young shisham are appearing in places.

The winter was a very mild one, and there was very little frost, and in Jaunsár only one fall of snow. Sál did not seed, nor did other plains trees at all well; and in the hills the deodár completely failed. On the other hand, spruce, silver fir, and blue pine and the oaks seeded freely.

Locusts visited the circle during May and June 1891, but the damage done by them in the forests was very slight

Coppice reproduction was good everywhere, the "Kharshu" oak coppice at good feet showing, as might be expected, better growth than the previous year.

The great enemy of natural reproduction in the Dún is frost, in Saháranpur outer forests, cattle, and in Jaunsár, fire. The first enemy is beyond our control, though the Divisional Officer is trying to devise means for protecting especially good spots; the second and third are old customs, but the Saháranpur grazing is much heavier than the necessities of agriculture require, and the Jaunsár fires should gradually be put a stop to, their effects being at any rate rendered as little damaging as possible by proper precautions. In some places in Jaunsár very great damage is done by goats, as is the case everywhere in India where they are allowed. Cattle, even buffaloes, are comparatively harmless, and sheep seem only to browze on the trees when the ground is covered with snow.

6.—Artificial Reproduction.

28. The work and expenditure under this head compare as follows with that of last year :—

	Expenditure.		Added area.	
	1890-91.	1891-92.	1890-91.	1891-92.
	Rs.	Rs.	Acres.	Acres.
Dehra Dún	74	1,020	...	...
Saháranpur	118	436	...	165
Jaunsár	1,111	2,192	36	29

In the Dehra Dún Division the Parduni nursery was strongly fenced, and about half an acre of beds prepared and sown with bamboo seed at the beginning of the rains. Four thousand seven hundred and twenty plants were reared and put into bamboo baskets ready to go out. The Johra plantation was weeded, and 6,692 seedlings and offshoots were put down to fill up blanks. The area will now be hoed up and gradually fully stocked. At Rámgarh the old sál and sissu plantation was strongly fenced and thoroughly hoed up at a cost of Rs. 434. Pits will now be made preparatory to planting the area with bamboo, for which there is a large demand in the Dún which it is difficult to supply.

29. In Saháranpur Rs. 408 were spent in planting the blanks on 165 acres in compartments 1, 2, and 3 of Ránipur coppice with bamboos, and Rs. 24 were spent in cleaning out inferior species in Pathri plantation.

30. In Jaunsár the cost of planting has been Rs. 2,192 during the year, which, as in the last year, included the preparation and sowing or planting when plants were available, clearing, and re-sowing.

7.—Works of Improvement.

31. Climber cutting—

	Area.		Cost.	
	1890-91.	1891-92.	1890-91.	1891-92.
	Acres.	Acres.	Rs	Rs.
Dehra Dún	4,595	3,079	646	712
Saháranpur . .	155	4,642	24	500
Jaunsár	...	...	...	...
	Sq. miles.	Sq. miles.	Cost. per sq. mile.	
			Rs	Rs.
Whole circle ...	7¼	12 1/16	89	100 5

In the Dehra Dún Division climbers were cut according to the prescriptions of the Working Plan. The Form No. 52 has been altered so as to show the work done according to Working Circles and compartments and afford a check on the Working Plan results, and the total amount of work done since the beginning of the Working Plan has been shown. This accounts for the large modifications in the area. The charges in the Ganges Working Circle were again very heavy, owing to the mass of creepers in the compartments bordering on the Suswa. The work was still going on at the close of the year. The work in Saháranpur requires to be systematized under a Working Plan and extended. The Siwalik forests are much hampered by the heavy growth of "Maljhan" (Bauhinia Vahlii) on both sides.

32. *Cutting back baaly grown and damaged trees.*

	Area.		Cost.	
	1890-91.	1891-92.	1890-91.	1891-92.
	Acres.	Acres.	Rs.	Rs.
Dehra Dún	3,042	6,215	1,748	3,304

The work was still going on at the close of the year, and the area prescribed by the Working Plan will all have been gone over before the rains. Those portions of the areas previously coppiced over are doing remarkably well, there being a fine crop of young sál shoots from the coppiced stools.

As described last year, 268 bamboo clumps in the Johra block were thinned out, the old dry culms and the crooked ones being removed at a cost of Rs. 95. Similar operations were carried out in Ránipur, where 1,120 clumps were thinned at a cost of Rs. 74. The work done was unsatisfactory, however, as in many cases the Conservator found whole clumps cut clean down. The Saháranpur Divisional Officer should have given more careful and personal instructions. In the Dún the result of the cleanings was not very good, there having been very few shoots; but the Conservator attributes this partly to the very late hot weather preventing the shoots appearing, and partly to the ravages committed by a rogue elephant who has since been shot by Rája Ranbir Singh of Dehra.

33. *Girdling and thinning.*—The following was the work done :—

	Area.		Cost.	
	1890-91.	1891-92.	1890-91.	1891-92.
	Acres.	Acres.	Rs.	Rs.
Dehra Dún	3,200	4,800	264	1,321
Jaunsár	1,490	1,729	598	239

In the Dehra Dún Division the number of trees girdled was 67,355. The rates in the Tirsal Range were high, owing to there being no water in the forests, and in the Ganges Range they were also too heavy, the Ranger having failed to supervise the work properly. The work has, as explained in the case of climber cutting, been shown by compartments, so as to bring the return into accord with Working Plan arrangements.

34. In Jaunsár the following work was done :—

	Acres.
Deoban Range, Karamba	350
Marsuwa	78 (including 12 acres already done).
Deota Range, Moriru	950
Kungagadh	310
Bawar Range, Koti Bawar	41
Total ...	1,729

8.—Roads and Communications.

35. In Dehra Dún Division Rs. 2,976 were spent, of which Rs. 1,678 on capital and Rs. 1,298 on maintenance charges. The Rs. 1,298 were on 12¾ miles of cart roads in the Jumna, Malhan, Ganges, and Lachiwála Ranges; on 1 mile 33 chains of

10 feet cart roads in the Lachiwála coppice; and on 17 miles 49 chains of inspection paths, mostly the Siwalik ridge path. We have now in the Dun 267 miles of tracks mostly suitable for carts, and 58 miles smaller paths

The following were the chief works done —

Capital.

	Miles	Rs
(1) Karwapani, Jumna road	7½	593
(2) Sabhawala, Timli "	3	259
(3) Gular parao Khairi "	1¾	138
(4) Siwalik ridge path	14¼	389
Smaller minor works		299
Total ...	26¼	1,678

Maintenance.

General repairs and small works in whole Division	1 298
Total ...	2 976

36 In the Saharanpur Division Rs 620 were spent Rs 317 on capital and Rs. 303 on maintenance charges The Rs. 317 were on 2¼ miles of 10 feet new road in Tira, 2¼ miles of a useful path from Ránipur to the Siwalik ridge, and Rs 100, contribution to Dehra Dún ridge path Rupees 486 were expended on the Hardwár-Khaira road, of which Rs 350 were contributed by the Saháranpur District Board, being Rs 80 less than the usual contribution made for the purpose

37. In the Jaunsár Division Rs 6,164 were spent, of which Rs 2,350 on capital and Rs. 4,114 on maintenance.

The following were the chief works done: —

Capital.

	Miles	Rs
(1) Pandawa Konain fuel road	2	902
(2) Thadiar Bamsu road along the Tons river	5	619
(3) Bamsai Riknargadh path . ..	4¼	142
(4) Koti Bawar Maindrot road	2¼	103
(5) Rikshin Balcha path	2¼	74
Total	10¼	1,840

Maintenance

	Miles	Rs	
(1) Chakráta Tons road	29½	2 002	of which Rs 900 from District Board
(2) Kathian Tiuni road		314	
(3) Mohna Kandar road	5	128	
(4) Thadiar sledge road		207	

The repairs on the Tons or "Simla" road were much needed as it is the chief artery of Jaunsár. The work consisted in cutting off projecting corners, erecting railings in bad places, renewing the revetment walls, and widening, and was to a large extent done as a famine work. There is still work for another year or two to put it thoroughly right, but every rupee spent on this road is repaid many times by better rates for produce The road along the Tons is required for the new works of sleeper cutting to begin next year in the Bamsu Valley, and includes a difficult passage across a precipice, where a workman was unfortunately killed. The new road to Konain was a useful work well carried out, but the Conservator's sanction to it was not previously obtained, a thing which he trusts will not occur again Jaunsár has now 1½ miles of carting road, 128¼ miles of bridle roads, and 388 miles of inspection paths

38 *Bridges.*—The only new bridge constructed was one over the Dhaiagadh at a cost of Rs. 76. New piers were also provided for that over the Tons at Datmir at a cost of Rs 35. There are 72 bridges maintained in the Jaunsár Division, including the suspension bridges of Tiuni, Maindrot, and Thadiar.

9.—Buildings.

39. In the Dehra Dún Division the inspection house at Kansrau was completed at a total cost of Rs. 1,155, of which Rs. 226 were paid in the year. The house is a good and suitable one and has already been very useful. Rupees 611 and Rs. 143 respectively were spent in the construction of a Ranger's headquarters at Lachiwala and a Forest Guard's chauki at Matak-Majri; Rs. 88 was spent on the addition of 2 rooms for the Mulhan Ranger at the Harbanswála chauki; and new stables were put up at Thano for Rs. 52, making a total of Rs. 1,120 spent on construction. Rupees 1,027 were spent on the maintenance of existing buildings of all kinds, including the re-roofing with shingles of the outhouses of the Rámpur-Mandi rest house and the alteration of mud walls for grass to those at Lachiwála.

40 In the Saháranpur Division Rs. 47 were spent in addition to Rs. 964 last year on the Kasumri bungalow, and Rs. 67 on the completion of the elephant shed at Dholkhand commenced last year. The construction of the Range headquarters at Rúnipur was completed for Rs. 671; and Rs. 506 and Rs. 374 respectively were spent on the Bádsháhibágh and Sháhjahánpur chaukis, making with a few small items a total of Rs. 1,696 spent on construction. Rupees 506 were spent on the maintenance of the existing buildings, including the repairs of the Dholkhand rest house and the Barkala Range headquarters.

41. In Jaunsár no new buildings of any importance were constructed, but very extensive and thorough repairs were effected to many of the old buildings, of which the following are the principal works :—

	Rs.
Reconstruction of the small fuel shed at the Chakráta depôt for	703
Renewal of the servants' quarters at Deoban	232
Preliminary work on the reconstruction of the Konain bungalow for ...	371
Extension and repairs of the chauki at Dakhpathar	224
Repairs and improvements of the Forest Rangers' quarters at Deoban for ...	156

The cost of maintenance amounted to Rs. 4,752.

42. In the Direction Division Rs. 90 were spent on the reconstruction of the máli's house, for the present storage of turpentine, and the future accommodation of office chaprásis.

43. The following is the return of the buildings at the close of the year, only permanent buildings being now included. The return has been revised and carefully checked and is now, it is believed, correct.

Division.	Houses for the controlling staff, including outhouses.	Quarters for subordinates, including outhouses.	Offices, stores, revenue chaukis, depôts, &c.	Wells.	Total.
Direction	...	...	1	...	1
Dehra Dún	7	8	31	2	48
Saharanpur	4	3	9	5	21
Jaunsár	17	10	32	...	59
Total ...	28	21	73	7	129

44. The list of permanent Forest Inspection houses was given last year and need not be repeated. It will be noticed that the work of providing good Range and Beat headquarters in the Dún and Saháranpur Divisions is going on well. In 1892-93 Range houses will be constructed at Jhajra and Barkot in the Dún, and at Barkala in Saháranpur. There will then be only one Range unprovided with a permanent house.

45. The total amount spent during the year on buildings was Rs. 9,191, of which Rs. 2,816 on capital expenditure and Rs. 6,375 on maintenance.

CHAPTER IV.

Yield and Working.

46. The yield and the results of the work of the year as compared with those of the previous year 1889-90 may be summarized as follows :—

			1890-91	1891-92.	Increase.	Decrease.
1	Yield of timber and fuel	c ft.	3,218,390	3,345,450	127,060	...
2	Value of above	Rs	4,83,029	5,48,495	64,506	...
3	Yield of timber	c. ft.	904,288	1,021,998	117,710	...
4	Value of above	Rs.	3,85,400	4,22,956	37,550	...
5	Yield of timber removed by Departmental Agency and purchasers	c. ft.	849,146	933,058	83,912	...
6	Value of above	Rs.	3,70,762	3,99,634	28,872	...
7	Yield of timber removed by grantees and right holders	c. ft.	55,142	83,940	33,798	...
8	Value of above	Rs	14,638	23,322	8,684	...
9	Yield of firewood and charcoal	c.ft.	2,314,102	2,323,452	9,350	...
10	Value of above	Rs.	98,529	1,25,539	27,010	...
11	Yield of fuel removed by Departmental Agency	c. ft.	252,995	252,694	...	301
12	Value of above	Rs.	17,748	43,669	25,921	...
13	Yield of fuel removed by purchasers ...	c. ft.	646,613	506,978	...	139,635
14	Value of above	Rs.	9,280	7,494	...	1,795
15	Yield of fuel removed by grantees and right holders	c. ft	1,414,494	1,563,780	149,286	...
16	Value of above	Rs.	71,492	74,376	2,884	...
17	Timber sold by Departmental Agency ...	c ft.	182,196	209,373	27,177	...
18	Receipts on above	Rs.	1,45,271	1,88,566	43,295	...
19	Timber sold direct to purchasers ...	c. ft	574,363	660,828	86,465	...
20	Receipts on above	Rs	96,638	79,397	...	17,241
21	Fuel sold by Departmental Agency ...	c. ft	413,366	217,933	...	195,433
22	Receipts on above	Rs.	32,034	21,656	...	10,378
23	Fuel sold direct to purchasers	c. ft	646,613	506,978	...	139,635
24	Receipts on above	Rs.	9,280	7,494	...	1,795
25	Bamboos sold	scores	86,297	68,340	...	17,957
26	Value of above	Rs.	10,551	8,342	...	2,209
27	Minor produce and grazing	,,	57,439	54,909	...	2,530
28	Value of other receipts	,,	16,090	23,813	7,723	...
29	Yield of timber and fuel per square mile ...	c. ft.	3,958	4,120	162	...
30	Value of above per square mile	Rs	505	578	83	...
31	Gross cash receipts per square mile ...	,,	428	488	60	...
32	Net ,, ,, ...	,,	101	142	41	...

Code Forms Nos. 54 to 57 supply detailed information regarding the yield, and comparative abstracts have been attached to Forms Nos. 54, 55, 56, and 57.

47. In para. 53 of last year's report it was explained how the forests of Dehra Dún were worked under Mr. E. E. Fernandez's Working Plan.

The following table shows the areas gone over for "Improvement fellings" and the number of trees marked per acre in the different Working Circles since the Working Plan came into force :—

Working Circles.	Sál and sain marked per acre.																Total number of trees, including fuel trees, marked per acre.							
	1887-88.				1888-89.				1889-90.				1890-91.				1887-88.		1888-89.		1889-90.		1890-91.	
	Acres.	1½ feet to 4½ feet.	Over 4½ feet.	Total.	Acres.	1½ feet to 4½ feet.	Over 4½ feet.	Total.	Acres.	1½ feet to 4½ feet	Over 4½ feet.	Total.	Acres.	1½ feet to 4½ feet	Over 4½ feet.	Total.	Acres.	Trees per acre.	Acres.	Trees per acre.	Acres.	Trees per acre	Acres.	Trees per acre.
Jumna ...	1,200	18·4	1·0	19 4	1,200	6·8	·4	7 2	1,150	12 0	1·0	13·0	1,200	6·1	1·0	7·1	1,200	28·1	1,200	31·6	1,150	21·1	1,200	13·8
Malhan ...	730	7·2	1 7	8·9	800	5·4	·5	5 9	800	8 9	·7	9·C	800	4·2	·5	4 7	730	19·2	800	22·8	800	22·0	800	20·0
Rámgarh ...	580	5 7	·4	6·1	500	3·5	·2	3 7	500	6·7	·5	7·2	500	2 8	·1	2 9	580	38·8	500	30·0	500	21.4	500	28·8
Nagadh .	500	4 7	·4	5 1	500	4 8	·5	5 3	500	5·9	·6	6 5	500	6·5	·7	7 2	500	9 5	500	22 0	500	20 3	500	17 0
Thano ...	...	...	...	...	200	11 0	1·5	12 5	200	13·3	1·8	15·1	200	7·8	·7	8·5	...	...	200	36 3	200	34 0	200	30 0
Tiruai ...	...	...	...	...	...	..	...	...	480	·1	·1	·2	500	2 5	·8	3·3	...	...	...	..	480	8·4	500	8·3
Parduni ...	1,000	1·1	·3	1·4	1,000	·9	·1	1·0	1,000	1·7	·6	2·3	1,000	2·5	·5	3·0	1,000	24 3	1,000	10 5	1,000	8·9	1,000	10·6
Average ...	3,960	10·3	·5	10·8	4,200	4·5	·4	4·9	4,630	7·3	·7	8·0	4,700	4·4	·6	5·0	3,960	24 3	4,200	24·4	4,630	18·0	4,700	17 9

It will be seen that the number of sál trees marked is less than in 1889-90. This is due to greater care in the marking, as there was reason to think that in places the number of trees marked was previously sometimes too great, especially in localities where damage from frost was to be feared.

48. As no one came forward to bid for the Thano coupe it was worked departmentally, the produce realizing Rs. 2,009 so far as it was sold during the year.

49. The Divisional Officer notices that at the annual auctions intending purchasers only too often fail to make themselves fully acquainted beforehand with the exact condition of what they bid for, and if they lose money in the speculation the bids naturally fall off the next year. Doubtless, by degrees, this will remedy itself.

50. These remarks will account to a very great extent for the falling off in the prices realized at the auction sales of the coupes prescribed for the year as compared with those of the previous year :—

Working Circles.	1889-90.	1890-91.	Remarks.
	Rs.	Rs.	
Jumna	12,100	7,100	
Malhan	13,675	7,000	
Rámgarh	6,825	3,250	
Nagu'dh	8,000	7,350	
Thano	Not sold.	Not sold.	
Tirsal	425	3,000	
Parduni	7,150	4,025	
Total ...	48,175	32,625	

51. As before stated, the Thano Working Circle coupe No. 6 was worked departmentally with the following results (estimated) during the year :—

	Rs.
Revenue	2,009
Expenditure	1,519
Surplus ...	490

which with the balance of material in hand, valued at Rs. 683, is as much as might have been expected had the coupe been sold by auction.

52. The coppice fellings of the Khairi Working Circle where 100 acres were sold standing to a purchaser realized Rs. 640. The annual coupe in the "Nichla Suswa" Working Circle sold for Rs. 145. In this Working Circle it is proposed to alter the "strip" method of felling, which has not worked well, into felling by compartments; but it is feared that owing to the coupe in Khairi being chiefly swamp and canebrake, the contractor will only remove the big wood and not carry out the coppicing. Proposals to abandon this Khairi Working Circle have been submitted to Government since the close of the year.

At Lachiwála a new coppice Working Circle has been formed, and a preliminary Working Plan for it has been framed and submitted to Government after the close of the year under report. Under it 30 acres were coppiced as the neighbouring tea estates were urgently wanting fuel. The cost was Rs. 526, of which Rs. 191 received by sales. Next year the full financial results can be given.

53. The bamboo sales showed a falling off, due to the clumps having got into a bad state of congestion, measures to obviate which are now being taken. Two hundred and twelve good bamboos were supplied as lances to the Erinpura Irregular Force for Rs. 108, and these seem to have given satisfaction.

54. In the *Sahárunpur Division* the work consisted in an improvement cutting of 343 acres in the Dholkhand sál forests, which produced 7,206 cubic feet not yet sold.

The coppice cuttings gave—

	Rs.
Ránipur Working Circle	220
Beribara "	400
Mohand "	1,000

As in Dehra Dún, the bamboo sales are falling off through deterioration of the clumps, which will require special measures to remedy. The number sold was 804,660, so far as can be estimated. The sales of minor produce realized Rs. 9,575, a falling off on last year owing to the decline in the production of gums in an unfavourable season.

55. In the *Jaunsár Division* the following was the work done :—

Deoban Working Circle.	(1) *Chakráta fuel supply.*—209,661 cubic feet of firewood were cut and 131,265 cubic feet taken to depôt, from the Kanjatra, Khopti, Konain, Kálsi, Korwa, and Matkangra Blocks. This included the cutting of 35 acres in the Kálsi Forest, which gave 30,810 stacked cubic feet of firewood, 1,800 cubic feet of charcoal, 305 sál ballis and tors, and 24 scantlings. It is satisfactory that we are now able to carry out to some extent the Working Plan provisions. (2) *Chakráta timber supply.*—The supply from Karamba and Siari Blocks amounted to 11,048 deodar and 3,579 Rai scantlings, aggregating 9,760 cubic feet.
Mundali Working Circle.	25,525 metre gauge sleepers were sawn up from dry and half dead trees, and 35,569 taken down the Dharagadh and thence to Dakhpathar. The comb weir and the telescopic system of floating worked well.
Tehri-Garhwál working Circle.	(1) 1,191 green and 310 dry deodár trees were sawn up into 80,313 metre gauge sleepers and 2,200 karis in Patangni, Partil, Temple, and Kamari Blocks. The outturn came, on an average, to 68 sleepers and 2 karis per tree, which was satisfactory in the interests of economy of material. 107,618 sleepers were carried to Chalbbai depôt, 85,849 thence to Thadiar, and 74,008 launched. (2) 800 deodár green trees were sold in Gokul Block, realising Rs 20 per tree.
Chír forests Working Circle.	2,257 chír trees were sold from various blocks and realized from Rs. 4-4-0 to Rs 8-8-0 per tree. 450 chír and kail trees were also cut up departmentally in Hanol, Ninus, and Panchkoti Blocks, and gave 13,558 karis, which were taken to the banks of the Tons.
Deogarh Range Work	In the Dadi leased forests 12,905 metre gauge sleepers were sawn from dry and fallen deodár and taken to the Pabar. 14,954 sleepers were taken to Dakhpathar.

56. The boom at Dakhpathar had to be removed in April, and an attempt was then made to erect one at Khara, but it did not work well. The boom was again set to work in November 1891 and worked well for the rest of the year.

57. The following statement shows the timber trade of the Jumna in 1891-92 :—

Description.	Government departmental timber.	Government timber removed by purchasers.	Timber from private forests.	Total.
	Number of pieces.	Number of pieces.	Number of pieces.	Number of pieces.
Deodár sleepers	102,939	91,980	553,705	748,624
Chír scantlings	173	114,846	262,810	377,829
Sál, &c., do.	...	...	67,510	67,510
1891-92 ...	103,112	206,826	884,025	1,193,963
1890-91 ...	105,494	99,472	407,541	612,507

The above shows an increase of timber exported, but the real increase was not so great and is mainly due to the rafting of timber which went adrift in the floods of February 1891.

The Jumna river dues amounted to Rs. 12,406, against Rs. 12,240 in the previous year, notwithstanding the reduction of the boom and rafting dues.

A short length of 320 feet of tramway from old materials formerly in use at Lambatach was erected at Dakhpathar and proved useful.

58. *Drift operations.*—Those on the Ganges were under the supervision of the Dehra Dún Divisional Officer. The right of collection was sold to a contractor for Rs. 1,100.

The work on the Jumna was, as usual, conducted by the Jaunsár Division and 25,000 cubic feet were collected and sold locally, while 3,400 cubic feet of charcoal were made and 1,070 cubic feet of scantling sawn from drift logs. At the request of timber merchants 158,256 drift sleepers were collected and salvage dues levied. The river rules worked well on the whole.

59. *Produce removed by free grantees and privilege holders.*—The estimated and actual issues under all heads compare as follows :—

Description.	1890-91.		1891-92.	
	Quantity	Value.	Quantity.	Value.
	C. ft.	Rs.	C. ft.	Rs.
Timber	55,142	14,638	88,940	23,322
Fuel	1,414,494	71,492	1,563,780	74,376
Bamboos ... ... No.	...	...	...	...
Grass and grazing	...	7,665	...	8,556
Minor produce	...	511	...	502
Total ...	...	94,306	...	1,06,756

As explained last year, the entries for the Dún and Saháranpur Divisions consisted principally of grazing dues at reduced rates by privileged villagers and removal of head loads of fuel, &c. In Jaunsár the removal of timber and firewood was in excess of the previous year, though it was below the average. This was due to bad agricultural prospects, the villagers being unable to afford to remove all their timber. The number of green deodár given free was 115, the number of sál 57.

60. *Resin tapping.*—This work has been continued as usual in the Bagur, Malon, Obra, and Ninus blocks in the Bawar Range, and 1,200 new trees were tapped, making 4,700 in all. The total outturn was 256 maunds, a lower yield than usual, but many of the trees have now been tapped for some time. Two hundred and seventy-eight maunds of crude resin were worked up at the Forest School at Dehra and gave 208 maunds of rosin and 235 gallons of turpentine. All the rosin was sold, and a rather better sale has been found for the turpentine, but still the demand is not very good. The Reporter on Economic Products, Mr. Thurston, who has taken much kind interest in the work, informs us that the bad sale is probably due to the turpentine being *too good*, that ordinarily obtainable in the Calcutta market where from 10,000 to 20,000 gallons are yearly consumed, being largely adulterated with kerosine oil, rock oil, naphtha, and benzoin. For this article the Calcutta prices vary from Re. 1-12-0 to Rs. 2-9-0 per gallon. We have been trying to sell at Rs. 2-8-0 retail, Rs. 2 wholesale, and though the demand is small, reports on quality are very favourable ; indeed, the Calcutta consumers consider that it might easily in time secure the market, though that is unlikely as we could hardly produce even 10,000 gallons, in the Circle. There is much more hope for a market in Upper India.

61. *Tar.*—One hundred maunds of chír tar were extracted at Chatra and Dharmigadh and a portion boiled down into pitch of good quality, which deserves to be better known and more widely used. The cost of extraction has been reduced to Rs. 2-8-0 per maund, coal tar being sold at Chakráta at Rs. 10. A new still for the extraction of *deodár oil*, which is locally used in medicine, was also set up at Deota.

62. *Other products.*—During the year enquiries, under the direction of the Inspector-General of Forests, have been made into the trade in "Bhábar grass" by Mr. L. Mercer, and into that in "Semla" gum by Mr. N. Hearle. A quantity of "kamila" powder (*Mallotus philippinensis*) was collected in the Dún and sent to the Reporter on Economic Products, who says it is worth Rs. 10 per maund in Bengal; but that in consequence of the greater cheapness of "arnotto" (*Bixa Orellana*) the latter is preferred to kamila, though it is not so good as a dye, the colour produced being not so fast.

CHAPTER V.

Financial Results.

63. The following table shows the results (1) average of 14 years; (2) of the four previous years; (3) of the year under review:—

	Average of 14 years.	1887-88.	1888-89.	1889-90	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	3,13,851	3,57,134	3,90,315	4,32,660	3,48,528	3,02,964
Expenditure	2,62,972	2,77,592	2,67,470	2,71,104	2,66,613	2,77,717
Surplus ...	50,879	79,542	1,22,845	1,61,556	81,915	1,15,247
Percentage of expenditure on receipts	83·79	77 72	68·52	62·66	76 50	70 07

The receipts show a large increase over those of the previous year and are the second highest on record, being next to that of 1889-90. The expenditure shows an increase too, generally for extension of improvement works. If the railway had taken over during the year the whole of the lakh of sleepers contracted for instead of only 71,784, the value thereof would have raised the total to about Rs. 4,37,000 and the receipts of the year would then have been the highest on record.

64. The receipts and expenditure of the Divisions compare as follows with the results of the previous year:—

Division.	Receipts.			Expenditure.			Surplus or deficit.		
	Average of nine previous years, 1881-82 to 1889-90.	1890-91.	1891-92.	Average of nine previous years, 1881-82 to 1889-90.	1890-91.	1891-92	Average of nine previous years, 1881-82 to 1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
Dehra Dún ...	79,550	93,558	76,609	50,002	45,858	50,343	+29,548	+ 47,700	+26,266
Saháranpur ...	38,569	32,615	44,880	22,350	28,873	29,678	+16,219	+ 3,742	+15,202
Jaunsár ...	2,02,078	2,22,115	2,70,704	1,62,550	1,63,684	1,70,702	+39,527	+ 58,431	+1,00,002
Direction ...	1,342	240	771	35,058	28,198	26,994	−34,316	− 27,958	−26,223
Total ...	3,21,539	3,48,528	3,02,964	2,70,560	2,66,613	2,77,717	+50,978	+ 81,915	+1,15,247

65. In the Dehra Dún Division the receipts were less than those of last year, as also of the budget estimate, while the expenditure shows an increase of about Rs. 4,400. The falling off in receipts is chiefly due to the auction sales of coupes under the Working Plan having fetched smaller prices, and to a lesser degree to smaller sales of departmental fuel; to the falling off of bamboo exports, and to a smaller supply of drift wood on the Ganges owing to a light monsoon. The general increase of expenditure is very small under A. Conservancy and Works, larger under B. Establishments under pay of Superior Officers.

66. In the Saháranpur Division, the increase in receipts is chiefly due to the recovery of last year's arrears of grazing dues, for which we are much indebted to the Collector, as for other kind assistance. The increase in expenditure is, as in Dehra Dún, under B. Establishment, chiefly pay and travelling allowance of Superior Officers.

67. In the Jaunsár Division, the increase in receipts is due to better sales of timber and forest material under almost all heads. The increase in expenditure is under A. Conservancy and Works and is mainly due to firewood operations for the

Commissariat supply, construction and extensive repairs of roads, and demarcation and plantation works, while *refunds* show a falling off, the Sirmoor Mahárája having been paid the arrears of his share of the Jumna river dues in the previous year. Under B. Establishment the expenditure is less than last year.

68. Form No. 62 shows the financial results of the year divided among the main heads of "Departmental works," "Other revenue," and "Formation, improvement, and protection of forests." The return has been drawn up in the same manner as that for the last year. It will be seen that departmental timber works give a surplus of Rs. 55,450, which would have been much greater if all the Jaunsár sleepers had been sold and it would have been greater even than that of 1889-90. In the other Divisions the departmental timber works are small and unimportant, and the deficit is due to the timber cut at Thano and Dholkhand not having been fully sold during the year.

The surplus under "Other revenue" amounts to Rs. 1,41,054, as against Rs. 1,24,397, the increase being chiefly in the Saháranpur and Jaunsár Divisions. The charges on formation, protection, and improvement of forests came with the necessary distribution of general charges to Rs. 81,257 as against Rs. 71,409 in 1890-91. The increase occurs chiefly in the Déhra Dún Division, and is due to increased work on roads, cutting back of injured sál, and similar operations.

69. In Form No. 60 are shown the revenue received and outstandings on account of revenue for the year. It will be seen that the outstandings due to the Department have decreased from Rs. 57,261 at the end of 1890-91 to Rs. 47,645 at the end of 1891-92. This is accounted for by a considerable decrease in Dehra Dún and Saháranpur, chiefly due to the recovery by the Collector of the latter district of the arrears of grazing dues. In Jaunsár there is a small increase as a set off due to outstandings on account of purchase of standing trees.

70. In Form No. 61 are shown the outstandings and liabilities on account of contractors and disbursers, the amount outstanding at the end of the year being more than it was at the beginning and occurring principally in the Jaunsár Division. This the Divisional Officer explains as due to the advances made on account of the Deota food supply and to sleeper carrying contractors for carrying on the work during the cold weather in the hope of somewhat relieving the prevailing local distress.

71. The value of the year's transactions stand as follows :—

		Rs.
Cash surplus		1,15,247
Add—Increase in value of timber and stock (Form No. 57A) ...		1,10,837
Add—Increase in value of plant (Form No. 57B)		1,941
Add—Increase of outstandings due to Department (Form No. 61) ...		7,018
Total ...		2,35,043
Deduct—Decrease in revenue outstandings	Rs. 9,016	
Departmental liabilities	6	
		9,022
Total net profits of the year ...		2,25,421

which is an increase of more than a lakh of rupees over last year.

CHAPTER VI.

General.

72. *Services of the Staff.*—The Conservator is glad to acknowledge the work done in all three Divisions during the year. He visited them all and inspected all three offices.

73. The Divisional Officers have specially brought to notice the good work done by some of their Range staff. In the Saháranpur Division, Pirbhu Lal, Forest Ranger, and in Jaunsár Division, Sadanand and Rama Datt, Forest Rangers, and Madho Ram, Forester, have been especially noticed. The following have also done good work :—in Dehra Dún, Har Swarup II, Gulab Rai, and Sharif Ali, Forest Rangers, and Akbar Ali, Forester; in Saháranpur, Pancham Singh, Forest Ranger, and in Jaunsár, Madho Parshad, Forest Ranger, and Dharam Singh and Muhammad Husain, Foresters.

74. During the year Rangers Har Swarup I and Keshavanand were promoted to Extra Assistant Conservator and transferred to the Oudh Circle. The Conservator regrets that the promotion could not have been given in the Circle which trained these men, and begs to reiterate the hope expressed last year that at least one really good Extra Assistant Conservator will be allotted to the School Circle for employment in Jaunsár, one of the heaviest Divisions in India and only a few years ago formed out of two Divisions. If this Circle has no Extra Assistant Conservator staff the result must be that as, one by one, the School Circle Forest Rangers become fit for promotion they will be transferred elsewhere and the work suffer in consequence. The work done by forest guards is better reported on from Dehra Dún Division than last year. The Jaunsár staff is good and efficient; it fortunately does not suffer from what is so bad for the plains staff of all grades, an almost complete cessation from work for three or four months, during which time they may get into idle habits. The Conservator is glad to endorse the testimony of the Divisional Officer to the good relations which exist between the subordinate staff in Jaunsár and the villagers, and to add that, in his opinion, this is due to Mr. Moir's own tact and patience and interest in the people.

75. A small improvement in the office staff was sanctioned during the year, but that in Jaunsár still requires to be better arranged. The Conservator acknowledges the assistance given him by his office staff, especially by the Head Clerk.

76. *Health.*—The health of the staff was fairly good during the year, till just at the end when the outbreak of cholera at Hardwár made itself severely felt in Dehra Dún and even in Jaunsár. In the Dún, three Government employés died. The Deputy Conservator remarks strongly on the total want of sanitary arrangements at Rikhikesh, to which place so many pilgrims went when the fair at Hardwár was closed, and attributes to this the violence of the cholera outbreak in the neighbourhood. When the Hardwár fair was closed numbers of pilgrims took up their quarters at Rikhikesh or camped in the forest between that place and Hardwár, and many deaths from cholera took place. At the close of the year there was considerable scarcity in Jaunsár owing to the failure of the crops.

77. The Saháranpur "raus" were levelled and surveyed as usual, but for the last time by the forest staff, as it has been decided that in future the work shall be done by the Public Works Department. The signs of closing up are very encouraging and testify to the necessity for the utmost exertion in fire protection.

78. The rainfall of the year was less than usual: the following were the returns from Dehra Dún, Deoban, and Deota:—

Months.	Stations.		
	Dehra Dún.	Deoban.	Deota.
April	0 35	Not recorded.	1 75
May	1·33	*9·47	2·69
June	3·49	0·81	0 23
July	14 10	12·37	12 20
August	19 25	17·87	15·60
September	6 84	8 29	5 70
October	2·92	1·66	2·55
November	...	...	...
December	...	...	...
January	0·10	0 37	0·05
February	2·26	3·68	0·80
March	...	0 20	0·20
Total .	50·64	54·72	41·87

* Recorded from 13th May 1892.

There was very little snow in Jaunsár in the winter, only one fall and that in February. Arrangements have been made to collect rainfall statistics at all Range headquarters in future.

CAMP DEOBAN:
The 11th June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle,
North-Western Provinces and Oudh.

NOTES ON

FIRE CONSERVANCY

AND

ANNUAL STATEMENTS.

APPENDIX I.

PROTECTION OF FORESTS FROM FIRE, 1891-92.

THE fire conservancy operations of the past and previous years compare as follows :—

Division.		Area in which protection was attempted.	Area actually protected.	Failures.	Percentage of failures to area actually protected.	Cost during the year.	Cost per acre of area actually protected.
		Acres.	Acres.	Acres.		Rs.	Pies.
Dehra Dún ...	1890-91 ...	158,354	158,309	45	0·03	2,494	3 02
	1891-92 ...	157,222	156,421	801	0·51	*2,873	3·52
Saháranpur ...	1890-91 ...	142,878	142,556	322	0·23	1,841	2·48
	1891-92 ...	142,878	141,956	922	0·65	1,386	1·87
Jaunsár ...	1890-91 ...	102,018	102,010	8	0·01	1,082	2·04
	1891-92 ...	106,000	105,297	703	0·66	1,614	2 84
Total ...	1890-91 ...	403,250	402,875	375	0·00	5,417	2 58
	1891-92 ...	406,100	403,674	2,426	0·59	5,873	2 79

* Includes Rs. 30 compensation to the widow of a fire patrol accidentally killed in Dholkot forest.

2. The season of 1891-92 has been a very unfavourable one. The monsoon of 1891 was a short one and light, the winter dry and mild so that throughout the early months of 1892 there was very little rain, the largest fall being in February. At the end the monsoon failed, and the rains cannot be said to have properly set in before the 9th July. The following was the amount of rain received at Dehra Dún during the period September 1891 to 9th July 1892 inclusive :—

	Amount.	*Chief falls.*
September 1891	6·84	
October "	2·92	
November "	...	
December "	...	
January 1892	0·10	
February "	2·26	15th (1·20")
March "	...	
April "	0·15	
May "	1·31	23rd (1·05")
June "	4·06	6th and 7th (1·44") 13th to 15th (2 37")
July 9th "	16·77	1st to 5th (1·02") 7th to 9th (4 22")

The rainfall of the Saháranpur Division was considerably less than this, and that of Jaunsár was also generally less. There was no snow worth the name till 22nd February 1892, when about 1½ feet fell. The hot season was an extremely dry one, as little or no rain fell till the middle of June 1892. March was a hot month, and during April, May, and much of June, the air, even far into the hills, was dry and filled with fine dust and the season unhealthy.

3. When all this is taken into consideration, the results of the year cannot be said to have been bad. Outside the protected forest areas fires raged everywhere, and that more damage was not done inside speaks well for the energy of the staff.

4. The returns of the year compared with those of 1890 show the following results :—

I.—Increase in area attempted ... ... 2,850 acres.
II.—Ditto ditto protected ... ... 799 "
III.—Percentage of total forest area under protection (78·14 per cent.), increase ... ... 0·68 p. ct.
IV.—Increase in expenditure ... ... 456 Rs.
V.—Percentage of failures to area actually protected, ·59 increase ... 0 50
VI.—Area attempted in hills 100,000 increase ... ... 3,982 acres.
VII.—Ditto ditto plains 300,100 decrease ... ... 1,132 "
VIII.—Cost per acre attempted, 2·77 pies increase ... ... 0·19 pies.
IX.—Ditto ditto protected, 2·79 pies ditto ... ... 0 21 "
X.—Ditto ditto of hill forest attempted, 2·92 pies increase ... 0·88 "
XI.—Ditto ditto plains ditto 2·92 pies ditto ... 0·16 "

5. The changes in areas under protection are summarized as follows :—

Additions.

	Acres.
Dehra Dún, Lachiwála range, Nagsidh forest	130
Jaunsár, Deoban range, Amlokri block	260
Do. do. do. Barasti do.	200
Do. Bawar do. Sangrani do.	60
Do do. do. Malón do.	250
Do. do. do. Obra do.	50
Do. do. do. Rangwar do.	9
Do. Deota do. Khunigadh do.	157
Do. do. do. Suras do.	220
Do. do. do. Naintwar do.	450
Do do. do. Salhra do.	1,010
Do. do. do. Noranu do.	20
Do. Deogarh do. Pushrar do.	10
Do. do. do. Mundhol do.	286
Do. do. do. Bhatar do.	100
Total ...	4,112

Exclusions.

Dehra Dún Division, Jumna Range, Jumna Forest	149
Ditto do. do. Timli do.	464
Ditto Malban do. Dholkot do.	122
Ditto do. do. Sherpur do.	94
Ditto do. do. Chandrabani do.	236
Ditto do. do. Rámgarh do.	17
Ditto do. do. Bulawála do.	91
Ditto Ganges do. Kanerao do.	57
Ditto Lachiwála do. Thanu do.	32
Total ...	1,262
Net increase ...	2,850

6. The new areas in Jaunsár to which fire protection was extended during the year amounted to 3,982 acres as against 2,503 acres of last year. Mr. Moir reports, as in the previous year, that all these areas are at considerable distances from villages, and that the villagers have no particular cause of complaint of hardship attending their closing from fire.

7. In the Dehra Dún Division 1,262 acres were excluded. This reduction is apparent only, and is due to the exclusion from the area shown as protected of some grass tappars and the Hatiwála line which are burnt departmentally for greater safety.

8. The cost of fire protection in each Division was as follows :—

Division.	Area actually protected.	Percentage of total forest area protected.	Length of fire lines	Cost. Clearing lines.	Burning lines.	Fire watchers.	Extinguishing fires, &c.	Total.	Per acre.
	Acres.		Miles.	Rs.	Rs.	Rs	Rs.	Rs.	Pies.
Dehra Dún: Average of previous 12 years ...	83,144	...	...	...	...	...	...	3,729	7·40
Dehra Dún: 1890-91 ...	158,309	99·97	350	559	722	1,128	85	2,494	3·02
Dehra Dún: 1891-92 ...	156,421	99·49	350	698	805	1,284	86*	2,873	3·52
Saháranpur: Average of previous 12 years ...	66,929	...	...	...	...	...	...	2,346	6·73
Saháranpur: 1890-91 ...	142,556	99·78	121	354	182	985	370	1,841	2·48
Saháranpur: 1891-92 ...	141,956	99·75	121	299	123	931	33	1,386	1·87
Jaunsár: Average of previous 12 years ...	77,610	...	...	...	...	...	...	1,353	3·34
Jaunsár: 1890-91 ...	102,010	99·99	368	87	808	169	18	1,082	2·04
Jaunsár: 1891-92 ...	105,297	99·33	385	104	1,006	292	212	1,614	2·94
Total: Average of previous 12 years ...	227,683	...	...	...	...	...	...	7,428	6·26
Total: 1890-91 ...	402,875	99·90	839	1,000	1,602	2,282	478	5,417	2·58
Total: 1891-92 ...	403,674	99·40	856	1,101	1,934	2,507	331	5,873	2·79

* Includes Rs. 30 compensation to the widow of a fire patrol killed in Dholkot forest.

The cost is higher than last year in the Dehra Dún and Jaunsár Divisions, while it is lower in Saháranpur: for the Circle as a whole it has risen from 2·58 to 2·79 pies per acre.

9. The area burnt during the last fire season was 2,426 acres as compared with 375 acres burnt in the previous year. The causes of the different fires may be classified under the main heads as below:—

Year.	I		II		III		IV		V		VI		VII		VIII	
	By forest establishment when burning fire lines.		Fires which entered the forests by crossing exterior fire lines.		By workmen not in forest employ by accident.		By villagers, travellers, or soldiers by accident.		Fire caused by lightning.		Fires maliciously lighted inside the forests.		Causes unknown.		Total.	
	No	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.	No.	Area in acres.
1891-92	6	37½	2	125	1	12	9	555½	1	½	8	1,653	3	42½	30	2,426
1890-91	1	1	1	10	1	3	3	8	1	8		...	3	345	10	375
1889-90	10	1,441	4	6,568	4	281	8	1,842	...	...	3	7,172	7	1,715	36	19,019
1888-89	1	2	4	18,097	1	1	10	1,989½	...	...	5	10,825	1	125	22	31,639½
1887-88	9	2,506	1	7,750	1	410	10	357	1	263	3	4,169	10	3,303	35	18,758
1886-87	10	2,340	1	26,560	...	...	6	438	...	...	9	8,021	9	328	35	37,696

10. The following table gives the details of the fires which occurred during the year:—

No.	Range.	Block.	Date of fire.	Year of protection.	Area burnt.	Remarks as to cause of fire.
			Dehra Dún Division.		Acres	
1	Jumna ...	Majri .	21st April 1892 ...	1884	24	Suspected incendiarism.
2	Do. ..	Chandpur	20th May 1892 ...	1887 ..	210	Ditto ditto.
3	Do. ..	Do .	3rd June 1892 ...	1887 ...	50	Ditto ditto.
4	Malhan ...	Bankhala ...	15th March 1892,	1884 ...	26	Supposed to have been by a grazier.
5	Lachiwala ..	Paled ...	29th do. .	1888 . .	370	Due to incendiarism probably.
6	Do. ...	Do. ...	20th April 1892 . .	1888 ..	19	Ditto ditto.
7	Ganges ..	Nichla Song . .	1st February 1892	1878—81...	3	Due to strong wind while burning the fire line.
8	Do. ..	Kharkhari .	4th March 1892	1888 ...	11	Supposed to have been caused by a fuel exporter.
9	Do. ..	Nichla Suswa coppice.	25th do. ...	1878—81...	75	Ditto ditto ditto a pilgrim to Rikhikesh.
10	Do. ..	Jhora ..	30th do. .	1883 ...	18	Ditto ditto ditto Ditto or a grazier.
			Total	...	801	
		In 1890-91 2 fires extending over...		...	45	
			Saháranpur Division.			
1	Western ..	Barkala, Khaironwala.	21st March 1892	1885 ..	430 362	Believed to have been lighted by some incendiary.
2	Do. ...	Mohand ...	23rd February 1892.	1884 ...	1	Ditto ditto.
3	Central .	Hetlan .	23rd April 1892	1882 ..	½	Caused by lightning.
4	Do. ..	Baniawála . .	23rd March 1892	1883 .	128	Ditto a boy grazing cattle and parching gram in open forest.
5	Eastern ...	Hánipur ..	20th May 1892 ...	1879 . .	½	Cause unknown.
			Total	...	922	
		In 1890-91 4 fires extending over ..		.	322	
			Jaunsár Division.			
1	Deoban ..	Pani-ka-nál ..	29th March 1892	1872 ...	120	Carelessness of a shepherd who lit a dry tree which rolled over the fire line.
2	Do. ...	Mohna .	1st February 1892	1872 ...	9	Carelessness of forest guard while burning fire line Forest guard's promotion stopped.

No.	Range.	Block.	Date of fire.	Year of protection.	Area burnt.	Remarks as to cause of fire.
		JAUNSÁR DIVISION—(*continued*).				
3	Deoban ...	Kálsi ...	25th April 1892 ..	1872 ...	36	Cause unknown; supposed to have been a traveller.
4	Hawar ...	Riknargadh ...	31st January 1892..	1872 ...	20	Due to an accident whilst burning a grass chappar, from which the fire spread to the neighbouring forest.
5	Do. ...	Utasna, Riknargadh ...	23rd March 1892 ...	1872 ...	1½	Carelessness of shepherds lighting fire in the forests.
6	Do. ...	Do. ...	Ditto ..	...	180	In one case the offender was sentenced to 14 days' imprisonment, and the other was pending owing to outbreak of cholera.
7	Do. ...	Ubra, Dharmigadh	7th April 1892 ...	1872 ...	2	Carelessness of forest guard whilst burning fire line. Fined half a month's pay.
8	Do. ...	Hamnai, Riknargadh ...	16th May 1892 ..	1872 ...	6	Cause unknown.
9	Deota ...	Khunigadh ...	9th March 1892 ..	1879 ...	12	Carelessness of contractor's man, who was fined and made to pay all costs.
10	Do. ...	Norand ...	15th May 1892 ..	1879 ...	1	Carelessness of a shepherd, who was fined.
11	Deogarh ...	Murach ...	15th December 1891	1872 ...	1½	Accident while burning fire line.
12	Do. ...	Kuru, Pádi forest ...	20th December 1891	1880 ...	2	Ditto ditto.
13	Do. ...	Raiengarh ..	27th March 1892 ..	1880 ...	187	Suspected incendiarism. Still under investigation.
14	Kotigadh ...	Dedragadh ..	29th March 1892 ..	1879 ...	64	Fire crossed from Kounthal forest, it not having been the custom to burn a fire line at that place before.
15	Do. ...	Do. ...	21st May 1892 ...	1879 ...	61	Same cause as above. The forest guard, not having taken proper precautions, was dismissed.
			Total	...	703	
		In 1890-91-4 fires extending over		...	8	
		GRAND TOTAL FOR THE CIRCLE		...	2,426	
		DITTO	1890-91	...	375	

11. In the *Dehra Dún Division* the chief fires were those in the Chandpur and Paled forests. The Chandpur forest is a detached piece in the Western Dún, and the fires were most probably due to graziers, for they were lit in several places and not only in the Government forest, but in adjoining private forests. The forest is overgrazed, the privilege holders being many. The Paled forest is in the Malkot hills, and here too, where the grazing is somewhat excessive, the cause of the fires was probably the same. The Divisional Officer says: "the damage done is not great as the forest is not a very valuable one," but the Conservator cannot agree that damage by fire is proportional to the value of a forest, but rather to the amount of inflammable material, which, in the case of Paled, is luckily not large. A third important fire was the one in the Nichla Suswa Coppice Working Circle, where 75 acres were burnt and much damage done to the coppice shoots. The Divisional Officer considers it to have been lit by pilgrims, as the forest was full of them, when, after the closing of the Hardwár fair, thousands made their way to the temples and bathing ghát at Rikhikésh.

12. In the *Sahárunpur Division* the chief fire was that which burnt over 792 acres in the Western Range. This fire must have been the work of an incendiary, and though the Divisional Officer has his suspicions as regards the authors, no sufficient evidence has yet been forthcoming. The villagers of Barkala seem to be those most implicated.

13. In the *Jaunsár Division* there were many fires, as was to be expected in such a season and in such a difficult country. The chief fire was that in the Raiengarh leased forest, which upon investigation seems to have been lit by two boys at their parents' instigation. The fire was on the boundary of the Jubal State and is now under enquiry by the Superintendent of the Simla Hill States. The same officer is also enquiring into the serious fires in the Dedragadh valley, where 125 acres were burnt. These fires came across the border from the Kounthal forests, which are regularly burnt every

year, and this year the boundary, which is usually a damp valley, was dry enough to burn. The fires in Pani-ka-nal and Riknargadh blocks were due to graziers and did considerable damage, the first to deodár, the second to chir seedlings.

14. On the question of the experimental careful firing of chír forests in the Chandnigadh block, upon which Government in para. 13 of G. O. No. 782F. of 24th October 1891 desired report, the Divisional Officer states as follows :—

"The small area of about 200 acres called Hatar, situated in the Chandnigadh block, Deogarh Range, was again fired under supervision from the top downwards during the early part of March. Owing to the extreme dryness of the season, some damage was done to the seedlings, but as the whole area is well covered with poles which are now practically beyond the stage of serious damage from fire, the experiment may be considered on the whole successful as an illustration of how chír forests which have been successfully fire protected for several years may under certain conditions be opened to careful firing, though a general application of the system is of course to be deprecated."

The Conservator, however, does not take quite so hopeful a view of the matter as does Mr. Moir. His opinions more nearly coincide with those expressed by the Conservator, Central Circle, in para. 31 of his report for 1890-91. Whether fired from above or fired from below the result is much the same—severe wounds to the bark of the old trees, and almost complete destruction of the advance growth. He admits that slow firing from the top is better than quick firing from below, but that is all, though if only the slight extra work of previously clearing away inflammable material from round the big trees and patches of seedlings were undertaken and all fires burnt in presence of the Forest guard and a staff of workmen, the results would probably be better. This will be tried. It would not be very expensive to go still further, sweep off the needles, and then cut the grass which is rarely very long and is often of good quality.

15. As last year, the rules of G. O. No. 349F. of 2nd May 1891 are said to have worked well. In Jaunsár it is difficult to introduce such rules so long as there are Government forests all about in which fires are not prevented and hardly even discouraged. The Conservator is carefully considering the whole question of the Jaunsár fires, and is of opinion that the rules require introduction, first of all into Government areas which are allowed to be burnt, and thence extension to village lands, as well as their strict application to village lands adjoining strictly protected areas.

16. The Dehra Dún and Saháranpur Divisional Officers have submitted some interesting information as regards the statistics of protection in their Divisions:—

	Dehra Dún.	Saháranpur.
	Acres.	Acres.
Area under protection from fire	157,222	142,878
Do. not under protection from fire (chiefly river side grass lands, which usually get burnt)	13,211	24,101
Area intentionally burnt by the Department as a measure of precaution (grass lands and broad fire belts)	5,712	21,525
Total, Reserved Forests ...	176,145	188,504
Area of unclassed State forest used as grazing ground and always burnt ...	8,368	...
GRAND TOTAL ...	184,513	188,504

In the Saháranpur Division, owing to the excessive grazing, much of the outer area open to fire is too clean eaten to be burnt and consequently escapes.

As regards Jaunsár, it may be said that practically all that it is not attempted to protect is allowed to be burnt, though of course, in some years, considerable portions escape.

DEHRA DÚN:
21st July 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle,
North-Western Provinces and Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE,

AREA OF RESERVED, LEASED, PROTECTED

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1892. Acres.	Equivalent in square miles.
			I.—Reserved Forests.		
Dehra Dún ...	Jumna ...	Dehra Dún	Ambari	4,203	7
			Chándpur	2,251	3
			Jumna	9,130	14
			Timli	19,704	31
	Malhan ...	Ditto	Sherpur	13,922	22
			Chandrabani	7,280	11
			Dholkot	4,810	8
	Rámgarh ...	Ditto	Rámgarh	10,482	17
			Bulawala	14,965	23
			Nágaidh	17,055	27
	Lachiwála ...	Ditto	Malkot	5,641	9
			Thano	6,576	10
			Tirsál	18,072	28
	Tirsál	Ditto	Topoban	489	1
			Birbhadar		
			Illkhikosh depôt ...	...	...
	Ganges ...	Ditto	Kanerao	20,402	32
			Motichur	22,073	34
			Total, Dehra Dún Division ...	177,064	277
Saháranpur ...	Western ...	Saháranpur	...	81,860	128
	Central ...	Ditto	...	74,961	117
	Eastern ...	Ditto	...	31,743	50
			Total, Saháranpur Division ...	188,564	295
Jaunsár ...	Deoban ...	Dehra Dún	Kalsi	4,568	7
			Strips on Jumna and Tons ...	422	1
			Singori, Kua, Korwa, Kotha, Bandla and Raura.	787	1
			Lokandi	6,248	10
			Deoban	6,580	10
			Ekra	5,313	8
			Karamba	11,842	19
			Konain	4,654	7
	Bawar	Ditto	Biknar	6,450	10
			Dharagádh	13,540	21
			Dharmigádh	9,942	15
	Deogarh ...	Ditto	Bastil	3,085	5
			Deogarh	10,776	17
			Khunigádh	11,974	19
			Total, Jaunsár Division ...	96,181	150
			GRAND TOTAL OF RESERVED FORESTS.	461,809	722
			II.—Leased Forests.		
	Deogarh ...	Panjáb Hill States ...	Raiengarh	5,425	9
			Dadi including Ori ...	1,030	2
	Deota	Tehri-Garhwál	Deota	4,937	8
			Hamsu	2,323	4
			Suras	1,014	2
			Datunir	2,560	4
	Kotigádh ...	Ditto	Naintwar	3,000	5
			Sahira	22,000	34
			Noránu		
			Chansil		
			Lambatách	2,883	4
			Kotigádh	3,068	6
			Total of Leased Forests ...	49,740	78

N.-W. PROVINCES AND OUDH. [Form No. 49.

AND UNCLASSED STATE FORESTS, 1891-92.

Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1892.		Number and date of Notification of addition or transfer.	Remarks.
Acres.	Acres.	Acres.	Equivalent in square miles.		
...	...	4,203	7		
...	...	2,251	3		
...	...	9,180	14		
...	...	19,704	31		
...	...	13,922	22		
...	...	7,289	11		
...	...	4,810	8		
...	...	10,482	17		
...	...	14,965	23		
...	925	16,130	26	Excluded by Government Notification No. 944, dated 16th December 1891.	
...	...	5,641	9	...	Now gazetted as two blocks—Paled and Maidan (see Notification 193 F. of 2nd March 1892).
...	...	6,576	10		
...	...	18,072	28		
...	...	480	1		
6	...	6	...	...	Gazetted as reserved forest on 1st March 1870, but not previously shown in the return.
...	...	20,402	32		
...	...	22,073	34		
6	925	176,145	276		
...	...	81,860	128		
...	...	74,061	117		
...	...	31,743	50		
...	...	188,564	295		
...	...	4,508	7		
...	...	422	1		
...	...	787	1		
...	...	6,248	10		
...	...	6,580	10		
...	...	5,313	8		
...	...	11,842	19		
...	...	4,654	7		
...	...	6,450	10		
...	...	13,540	21		
...	...	9,942	15		
...	...	3,085	5		
...	...	10,776	17		
...	...	11,974	19		
...	...	96,181	150		
6	925	460,890	721		
...	...	5,425	9		
...	...	1,630	2		
...	...	4,937	8		
...	...	2,323	4		
...	...	1,014	2		
...	...	2,500	4		
...	...	3,000	5		
...	...	22,000	34		
...	...	2,883	4		
...	...	3,968	6		
...	...	49,740	78		

FOREST DEPARTMENT, SCHOOL CIRCLE,

AREA OF RESERVED, LEASED, PROTECTED

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1891. Acres.	Equivalent in square miles
			III.—Protected Forests. *Nil*		
			IV.—Unclassed State Forests.		
Jaunsár ...	Dooban ..	Dehra Dún	Chakráta Cantonment Forests, comprising— Lurll	290	...
			Sutoll ..	188	...
			Forest garden ..	48	...
Dehra Dún ...	Ganges and Tiráli ...	Ditto	Waste lands available for cultivation	8,368	13
	Rámgarh and Lachiwála.	Ditto	Camping ground at Bulawála, Lachiwála and Thano.	...	...
			Total, Unclassed State Forests	8,894	13
			GRAND TOTAL OF FOREST LAND	520,443	813

Abstract of Changes

Area at commencement of year	.	...	
Added during the year ...	...	...	
Excluded during the year ...	...	..	

FOREST DEPARTMENT, SCHOOL CIRCLE,

REGISTER OF BREACHES OF

Forest Division.		Cases pending from 1890-91.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
Dehra Dún	A.	...	...	1	...	2	3	3
	B	...	2	14	4	9	29	29
	C	...	...	...	...	...	...	...
Saháranpur	A	1	1	2	2	2	7	7
	B.	...	1	5	9	1	16	16
	C.	.	..	...	...	...	...	...
Jaunsár	A.	...	...	2	...	1	3	3
	B	...	6	15	12	14	47	47
	C.	...	...			...	...	...
GRAND TOTAL ...	A.	...	1	5	2	5	13	13
	B	...	9	34	25	24	92	92
	C		...	...	..	.	...	

N.B.—A means cases taken into Court
B means cases disposed of under section 67 of Indian Forest Act, 1878.
C. means undetected cases.

DEHRA DÚN:
The 21st June 1892.

[Form No. 49.

N.-W PROVINCES AND OUDH.

AND UNCLASSED STATE FORESTS, 1891-92—(*continued*).

Added during the year.	Excluded or transferred to other heads	Area on 31st March 1892		Number and date of Notification of addition or transfer.	Remarks.
Acres.	Acres.	Acres.	Equivalent in square miles		
	.	290	...		
	..	188			
	...	48	.		
	...	8,358	13.		
33	...	33	...	...	Acquired by purchase in past years.
33		8,927	13		
39	925	519,557	812		

during the year.

				Acres.
..	...	...		520,443
...	...	...	..	39
				520,482
...	...	...	...	925
		Total	.	519,557

[Form No. 50.

N W. PROVINCES AND OUDH.

FOREST RULES DURING 1891-92.

Disposed of during the year.						Cases pending at close of year.	Remarks.
Convictions.		Acquittals.		Total.			
Cases	Persons.	Cases.	Persons	Cases.	Persons.		
1	1	1	4	2	5	1	
24	53	5	15	29	68	...	
...	..	...	...	..	...	...	
6	12	...	1	6	13	1	
15	52	1	4	16	56	...	
...	..	...	...	...	...	...	
2	67	1	1	3	68	...	
47	63	...	..	47	63	...	
...	..	..	...	...	...	...	
9	80	2	6	11	86	2	
86	108	6	19	92	187	...	
...	...		..	..	...		

J S. GAMBLE,

Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form No. 51.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON, 1892—TO ACCOMPANY REPORT FOR 1891-92.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
	Jumna Range.							
	Ambari	1887	4,203	4,203	..	4,203	69	
	Chándpur	1887	2,251	2,251	260	1,991	109	
	Jumna	1886	8,905	8,156	...	8,156	68	
	Tiuli	1884	19,704	19,240	24	19,216	215	
	Total	...	34,463	33,850	284	33,566	461	
	Malhan Range.							
	Dholkot	1884	4,810	4,688	26	4,662	156	
	Sherpur	1884	13,922	13,828	...	13,828	123	
	Chandrabani	1878	7,289	7,053	...	7,053	112	
	Total	..	26,021	25,569	26	25,543	391	
	Ramgarh Range.							
	Rámgarh	1878	10,197	10,215	...	10,215	135	
	Bulawala	1872	14,525	14,434	...	14,434	167	
Dehra Dún	Total	...	24,722	24,649	...	24,649	302	
	Lachiwala Range.							
	Nagsidh	1883	13,393	13,523	...	13,523	235	
	Thano	1877	6,576	6,544	.	6,544	171	
	Malkot	1888	5,641	5,641	389	5,252	140	
	Total	.	25,610	25,708	389	25,319	546	
	Ganges Range.							
	Kanerao	1878-81	14,657	14,600	78	14,522	544	
	Motichur	1883	18,960	18,960	24	18,936	153	
	Total	...	33,617	33,560	102	33,458	697	
	Tirsal Range.							
	Tirsal	1887	13,836	13,836	...	13,836	472	
	Bhubhaldhar	1888	40	50	..	50	4	
	Total	...	13,876	13,886	...	13,886	476	
	Total, Dehra Dún Division	..	158,309	157,222	801	156,421	2,873	

	Western Range.							
Saháranpur	Khara	1879	9,612	9,612	...	9,612	77
	Hathibagh	1885	7,066	7,066	...	7,066	46
	Chopal	1885	2,765	2,765	...	2,765	26
	Khairgamala	1885	2,970	2,970	362	2,608	55
	Barkala	1885	5,133	5,133	430	4,703	19
	Kasumri	1885	2,579	2,579	...	2,579	31
	Sabarura	1886	6,048	6,048	...	6,048	10
	Kotri	1885	2,669	2,669	...	2,669	29
	Kaluwála	1885	5,114	5,116	...	5,116	8
	Sháhjahánpur	1887	9,572	9,572	...	9,572	14
	Khajawas	1887	8,392	8,392	...	8,392	54
	Budhabam	1887	3,771	3,771	...	3,771	24
	Mohand	1884	6,131	6,131	1	6,130	107
	Total		71,822	71,824	793	71,031	500
	Central Range.						
	Sukh	1881	4,811	5,111	...	5,111	22
	Chilkawála	1882	7,774	7,782	...	7,782	5
	Gaj	1882	3,578	3,578	...	3,578	5
	Andheri	1882	5,719	5,719	...	5,719	5
	Dholkhand	1880	3,908	3,916	...	3,916	26
	Malowála	1880	2,122	2,122	...	2,122	7
	Bam	1880	3,013	3,013	...	3,013	28
	Betban	1882	6,781	6,781	½	6,780½	68
	Gholna	1880	3,746	3,746	...	3,746	21
	Lalwála	1884—89-90	709	709	...	709	43
	Baniawala	1883	500	500	128	372	32
	Lakarkot	1879	3,646	3,646	...	3,646	116
	Ganjerban	1879	2,833	2,833	...	2,833	110
	Rasulpur	1879	1,987	1,987	...	1,987	26
	Seudhla	1883	2,560	2,560	...	2,560	107
	Tura	1884	1,791	1,791	...	1,791	76
	Total		55,478	55,794	128½	55,665½	697
	Eastern Range.						
	Harnaul	1886	2,035	2,035	...	2,035	16
	Chirak	1886	3,860	3,860	...	3,860	23
	Rauh	1879	3,038	3,038	...	3,038	22
	Ranipur	1879	4,881	4,885	½	4,884½	55
	Manpur	1886	1,361	1,361	...	1,361	51
	Pathra	1880	81	81	...	81	22
	Total		15,256	15,260	½	15,259½	189
	Total, Saharanpur Division		142,556	142,878	922	141,956	1,386
	Deoban Range.						
Jaunsar	Kalsi	1872	4,568	4,568	36	4,532	...
	Bakrab						
	Ambawa						
	Oak forests south of Chakrata		775	775	...	775	6
	Cantonment blocks and forest garden	1880	526	526	...	526	10
	Lokanda	1869	5,580	5,580	...	5,580	50
	Deoban	1872	5,600	5,600	9	5,591	65
	Ekra	1872	3,236	3,496	...	3,496	30
	Konain	1872	3,923	4,123	120	4,003	32
	Karamba	1872	2,050	2,050	...	2,050	22
	Total	..	26,258	26,718	165	26,553	205

[Form No 51.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON, 1892—TO ACCOMPANY REPORT FOR 1891-92—(*contd.*).

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1891.	During dry season of 1892.			Cost during the season.	Remarks.
				Area attempted to be protected	Failures.	Actually protected.		
			Acres.	Acres.	Acres.	Acres.	Rs.	
Jaunsár—(*continued*).	**Bawar Range.**							
	Riknar ...	1872	5,468	5,470	207½	5,262½	85	
	Dharagadh ...	1872	6,455	6,515	...	6,515	75	
	Dharmigadh	1872	3,076	3,876	2	3,374	75	
	Bastil ...	1875	1,667	1,669	...	1,669	45	
	Khunjawar...	1884	100	109	...	109	1¾	
	Total ...	.	16,766	17,189	209½	16,979½	293	
	Deota Range.							
	Khunigadh ...	1879—84	3,999	4,157	12	4,145	352	
	Molta ...							
	Chatra ...							
	Hanol ...							
	Deota ...	1879—84	4,937	4,937	...	4,937	178	
	Bamsu ...	...	2,323	2,323	...	2,323		
	Suras ...	...	1,014	1,234	...	1,234		
	Datmir ...	1872	2,560	2,560	...	2,560	16	
	Naintwar ...	1885	3,000	3,450	...	3,450	44	
	Salhra ...	1885	7,500	9,410	...	9,410	65	
	Noranu ...	1885	1,500	1,520	1	1,519		
	Total ...	...	26,833	29,591	13	29,578	655	
	Deogarh Range.							
	Deogarh ...	1875-76	5,147	5,546	1½	5,544½	124	
	Haiengarh ...	1880	5,425	5,425	187	5,238	40	
	Dadi ...	1880	1,730	1,730	2	1,728	32	
	Total ...	.	12,302	12,701	190½	12,510½	196	
	Kotigadh Range.							
	Chansil ...	1885	13,000	13,000	...	13,000	143	
	Kotigadh ...	1879	3,968	3,068	125	3,843	30	
	Lambatách ...	1879	2,883	2,883	...	2,883	90	
	Total ...	...	19,851	19,851	125	19,726	263	
	Total, Jaunsár Division ...	...	102,010	106,000	763	105,297	1,614	
	GRAND TOTAL FOR THE CIRCLE ...	...	402,875	406,100	2,426	403,674	5,873	

DEHRA DÚN:
The 21st July 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form No 52.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF PLANTATIONS, 1891-92.

Division.	Name of plantation.	Area in acres. On 1st April 1891.	Added during the year.	Excluded during the year.	Area on 31st March 1892.	Receipts of the year.	Charges of the year.	Total charges to 31st March 1892.	Remarks.
						Rs.	Rs.	Rs.	
	Regular Plantations.								
Saháranpur ...	Pathri	80¼	...	...	80¼	...	24	1,220	Shisham, teak, &c.
	Total ...	80¼	...	...	80¼	..	24	1,220	
	Cultural Operations.								
Dehra Dún ...	Phandowála ...	5½	...	...	5½	...	...	...	Tun, Paper mulberry &c.
	Rámgarh	...	...	...	...	...	424	7,453	17½ acres prepared for bamboos, &c.
	Johra	86	...	...	86	...	596	...	Bamboos.
	Total ...	91½	...	...	91½	...	1,020	7,453	
Saháranpur ...	Bánipur	...	165	...	165	...	408	408	Bamboos.
	Total ...	...	165	...	165	...	408	408	
Jaunsár ...	Korwa	15	...	...	15	...	28	385	Chír, kail, ban, &c.
	Mohna	192	8	...	200	...	335	4,334	Deodár, &c.
	Motkangra	74	...	...	74	...	27	979	Ditto
	Hajawa	8	..	...	8	...	...	115	Rai
	Thona	4	...	...	4	...	...	733	Do, &c.
	Kunjatra	31	2	...	33	...	95	799	Ditto.
	Koti Kanasár ...	139	...	...	139	...	...	1,664	Deodár, &c.
	Sodyar ...	415	...	...	415	...	420	5,741	Ditto.
	Kathian	255	...	...	255	...	61	3,211	Ditto.
	Konain	122	...	...	122	...	...	2,480	Ditto.
	Panchkoti	11	...	...	11	...	51	132	Ditto.
	Mundali	36	5	...	41	...	512	1,005	Ditto.
	Partil	48	...	...	48	...	55	1,140	Ditto.
	Jaurási	15	...	...	15	...	70	401	Ditto.
	Temple	31	...	...	31	...	43	234	Ditto.
	Goria	13	...	...	13	...	24	178	Ditto.
	Daupti	100	...	...	100	...	...	983	Deodár and kail.
	Chakora	34	...	...	34	...	20	366	Deodár.
	Gurasua	2	...	...	2	...	20	110	Ditto.
	Ola	68	...	...	68	...	13	454	Ditto.
	Mursch	16	...	...	16	...	90	556	Ditto.
	Raiengarh	20	6	...	26	...	149	804	Ditto.
	Lurli	75	...	..	75	...	95	1,048	Ditto.
	Sutoli	22	...	...	22	...	35	543	Ditto.
	Thanwar	6	...	...	6	...	25	82	Ditto.
	Pipal	...	4	...	4	...	24	24	Kail.
	Lohasu	..	4	...	4	...			Deodár.
	Total ...	1,752	29	...	1,781	...	2,192	29,146	
	GRAND TOTAL OF CULTURAL OPERATIONS ...	1,843½	194	...	2,037½	...	3,620	37,007	

DEHRA DÚN;
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

Form No. 52A.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF PLANTATIONS, 1891-92.

Division.	Name of plantation.	Area in acres. On 1st April 1891.	Area in acres. Added during the year.	Area in acres. Excluded during the year.	Area in acres. Area on 31st March 1892.	Receipts of the year.	Charges of the year.	Total up to 31st March 1892.	Remarks.
DEHRA DÚN.									
Working Circles.			**Climber Cutting.**			Rs.	Rs.	Rs.	
Jumna ...	Compartments Nos. 1—5	8,699	...	...	2,699	6,000	...	...	657
Malhan ...	Compartments „ 1—7 and 8 (part of).	9,533	8 (complete)	550	3,283	6,800	...	52	885
Rámgarh ...	Compartments „ 1—8 and 9 (part of).	10,637	9 (part) 10	530	3,967	7,200	...	55	821
Nagsidh ...	Compartments „ 1—5	3,918	...	...	1,218	2,700	...	...	424
Thano ...	Ditto „ 1—7	6,722	8	200	5,072	1,850	...	26	532
Tiráli ..	Ditto „ 1—4 and 5 (part of).	3,159	5 (complete) 6 (part)	649	324	3,484	...	150	659
Ganges ..	Compartments „ 1—3 4 & 5 (part of).	6,723	4 and 5 (complete), 6 (part)	1,150	2,623	5,250	...	429	1,041
	Total ...	40,401	...	3,079	19,186	33,284	...	712	5,049
Sahárunpur.									
Central range ...	Lalwala, compartment Nos. 1 & 2.	140	...	...	...	140	...	...	23
	Lakarkot (8 ditto) ...	1,283	...	2,363	...	3,646	...	415	472
	Ganjarban block } Rasúlpur „ }	1,600	...	...	...	1,600	...	...	64
	Tira, compartment Nos. 1 & 2.	155	...	...	...	155	...	...	24
	Dholkhand block ...	...	...	521	...	521	...	45	45
Western „ ...	Audheri do. ...	...	...	475	...	475	...	40	40
	Badshahi bágh ...	45	...	...	...	45	...	...	10
	Total ...	3,223	...	3,359	...	6,582	...	500	683
Jounsár.									
Deoban range...	Haripur block, Kalsi forest.	640	...	...	...	640	...	...	57
	Total for the Circle ...	53,254	...	6,438	19,186	40,506	...	1,212	5,789
DEHRA DÚN.									
Working Circles.			**Cutting back of injured Sal.**						
Jumna ...	Compartment Nos. 1 & 2	...	1 & 2	2,400	...	2,400	...	1,057	1,057
Malhan ...	Ditto „ 1 2 & 4	2,458	3 (part) 5 (do.)	1,170	...	3,634	...	565	1,994
Rámgarh ...	Ditto „ 1—6	6,250	7	500	1,215	5,535	...	281	4,013
Nagsidh ...	Compartment „ 1	1,338	...	...	838	500	...	...	744
Thano ...	Ditto „ ...	...	1 2 & 4 (part).	280	...	280	...	262	262
Tiráli ...	Ditto „	466	2	1,034	...	1,500	...	580	971
Ganges ...	Ditto „ 1 (part)	425	1 (complete), 2 (part).	825	...	1,250		559	733
	Total ...	10,937	...	6,215	2,053	15,099	...	3,304	9,774
DEHRA DÚN.									
Working Circles.			**Gidrling of inferior species.**						
Jumna ..	Compartments No. 1—4...	3,550	5	2,450	...	6,000	...	330	865
Malhan ...	Ditto „ 1—6...	1,960	7	4,040	...	6,000	...	220	896
Ramgarh ...	Ditto „ 1—9	1,730	10	5,470	...	7,200	...	116	722
Nagsidh ...	Ditto „ 1—3 & 4 (part of).	1,000	4 (complete), 5 (part).	1,020	...	2,020	...	62	272
Thano ...	Ditto „ 1—5..	1,000	6 (complete), 7 (part).	600	...	1,600	...	85	294
Tiráli ..	Ditto „ 1—4...	1,470	5	1,530	...	3,000	...	98	236
Ganges ...	Ditto „ 1—3 & 4 (part of).	3,200	4 (complete), 5 (part).	1,280	...	4,480	...	401	887
	Total ...	13,910	...	16,390	...	30,300	...	1,321	4,172

Remarks: 1,283 acres out over a second time.

Form No. 52A.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

AREA OF PLANTATIONS, 1891-92—(*continued*).

Division.	Name of plantation.	Area in acres. On 1st April 1891.	Added during the year.	Excluded during the year	Area on 31st March 1892.	Receipts of the year.	Charges of the year.	Total up to 31st March 1892.	Remarks.
Jaunsár.	**Girdling of inferior species to encourage deodar reproduction (before fellings).**								
Kotigádh range	Banarpáni	140	...	...	...	140	...	...	
	Chakora	130	...	...	...	130	...	...	
	Partil	200	...	...	...	200	...	...	68
	Temple	95	...	...	...	95	...	...	
	Kanga	50	...	...	...	50	...	...	
	Patangni	70	...	...	...	70	...	...	
Deota " ...	Bansu	466	...	...	...	466	...	...	1,247
	Dakuri	1,482	...	...	...	1,482	...	...	
	Surás	1,014	...	...	...	1,014	...	...	227
	Moruru	...	...	950	...	950	...	153	153
	Kangagádh	...	...	310	...	310	...		
Bawar " ...	Tutwa block, Mundall forest.	620	...	...	...	620	...	...	204
	Sangared near Koti Bawar	72	...	...	...	72	...	...	42
	Koti, 1st class forest ..	...	...	41	...	41	...	10	10
	Total ...	4,330	...	1,301	...	5,640	...	163	2,011
Jaunsár.	**Thinning and girdling inferior species above young deodar growth (after fellings).**								
Bawar range ...	Kathian	400	...	.	...	400	...	...	90
Kotigádh " ...	Tisanwar	510	...	...	...	510	...	...	455
	Chakora	457	...	...	...	457	...	...	
	Lohasu	303	...	...	...	303	..	...	
	Gursana	295	...	...	...	295	...	...	
	Banarpáni	100	...	..	...	100	..	...	23
	Kandar	14	...	...	...	14	...	...	12
Deota " ...	Partil	358	...	...	...	358	...	...	238
	Temple	30	...	...	...	30	...	...	8
Deogarh " ...	Raiengarh	12	...	...	...	12	...	...	5
	Murách	83	...	...	...	83	...	...	27
	Koti Kanasár ...	54	...	...	...	54	...	...	73
Deoban ...	Bodyár	16	...	...	...	16	..	...	18
	Koptí	8	...	...	...	8	...	...	12
	Marauwa	12	.	78	...	90	...	25	43
	Missau	100	...	...	...	100	...	...	97
	Karamba	50	...	350	...	400	...	51	71
	Konain	40	...	...	...	40	...	...	14
	Total ...	2,851	...	428	...	3,279	...	76	1,195

DEHRA DÚN:
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

FOREST DEPARTMENT, SCHOOL

OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL

Division.	Timber in the rough; logs.					Timber in the rough; poles.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders	Total.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
										I.—Reserved
Dehra Dún.										
(a) Regeneration—										
Selection fellings	578	490	...	...	1,068	108	490	...	...	598
Coppice do.	33	...	...	...	33	...	...	...	...	...
(b) Amelioration—										
Improvement fellings ...	208	45,101	...	...	45,309	...	56,694	...	...	56,694
Thinnings	...	...	...	...	...	...	...	...	...	...
(c) Miscellaneous—										
Unclassed fellings	...	247	...	...	247	...	55	...	...	55
Clearances	...	1,097	...	...	1,097	...	961	...	...	961
Drift wood	2,891	2,200	...	...	5,151	113	2,194	...	...	2,307
Dead and fallen wood ...	...	65	...	...	65	...	...	...	...	...
Total ...	3,710	49,260	...	...	52,970	221	60,394	...	...	60,615
Sahárunpur.										
(a) Regeneration—										
Selection fellings	153	15,065	...	...	15,218	...	...	...	...	...
Coppice do.	...	...	...	...	...	...	...	...	...	...
(b) Amelioration—										
Thinnings	...	...	...	...	...	7,206	662	...	...	7,868
(c) Miscellaneous—										
Unclassed fellings	...	...	...	...	...	582	1,407	75	...	2,064
Clearances	...	...	...	...	...	...	...	...	...	...
Dead and fallen wood ...	...	...	...	...	...	...	...	...	...	...
Total ...	153	15,065	...	...	15,218	7,788	2,069	75	...	9,932
Jaunsár.										
(a) Regeneration—										
Selection fellings	...	295,660	84,185	...	379,845	...	...	210	...	210
Clean do.	..	...	...	...	...	...	...	...	...	..
Coppice do.	...	...	..	...	...	305	...	...	...	305
(b) Amelioration—										
Thinnings	...	...	...	...	...	29	...	...	...	29
(c) Miscellaneous—										
Unclassed fellings	.	..	...	...	...	...	538	...	...	538
Drift wood	1,164	..	...	...	1,164	...	...	...	...	...
Total ...	1,164	295,660	84,185	...	381,009	334	538	210	...	1,082
GRAND TOTAL ...	5,027	359,985	84,185	...	449,197	8,343	63,001	285	...	71,629
										II.—Protected
										Nil
										III.—Unclassed
										Nil.
										ABg
(a) Regeneration—										
Selection fellings	731	311,215	84,185	...	396,131	108	490	210	...	808
Clean do.	...	.	...	...	...	...	...	...	...	...
Coppice do.	33		...	...	33	305	...	...	...	305
(b) Amelioration—										
Improvement fellings ...	208	45,101	...	...	45,309	7,235	56,694	...	...	63,929
Thinnings	...	...	...	...	...	...	662	...	...	662
(c) Miscellaneous—										
Unclassed fellings	...	247	...	...	247	582	2,000	75	...	2,657
Clearances	.	1,097	...	...	1,097	...	961	...	...	961
Drift wood	4,055	2,200	...	...	6,315	113	2,194	...	...	2,307
Dead and fallen wood ...	...	65	...	...	65	...	...	...	...	...
Total ...	5,027	359,985	84,185	...	449,197	8,343	63,001	285	...	71,629

Charcoal should be shown by its equivalent in fuel, the quantity of wood

DEHRA DÚN;
The 8th June 1892.

Form No. 54.

CIRCLE, N.-W. PROVINCES AND OUDH.

DURING THE YEAR 1891-92 AND AGENCY OF EXPLOITATION.

Sawn or squared timber.					Miscellaneous.					Fuel.					Total.
Government	Purchasers	Free grantees.	Right holders.	Total.	Government.	Purchasers	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Outturn.
C. ft.	C. ft	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft	C. ft.	C. ft.	C. ft	C. ft.	C. ft.
Forests.															
67	...	...	...	67	502	400	...	...	1,052	320	...	...	...	320	3,105
...	...	...	...	...	38	...	...	...	38	40,426	41,350	...	...	81,076	81,747
6,253	1,033	...	...	7,286	467	46,574	...	...	47,041	...	4,317	...	...	4,317	160,647
...	...	...	...	...	...	83	...	...	83	...	37,202	...	...	37,202	37,285
...	...	...	...	...	...	552	...	...	552	...	...	...	...	...	854
...	...	...	...	...	...	1,057	...	...	1,057	...	...	...	...	...	3,115
116	7	...	...	123	...	2,191	...	...	2,191	7,792	736	.	...	8,528	18,300
...	...	...	...	...	...	14	...	...	14	2,933	160,395	384,033	...	557,261	557,340
6,436	1,040	...	...	7,476	1,067	50,961	...	...	52,028	51,471	252,000	384,033	...	689,504	862,393
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15,218
...	...	...	...	...	...	...	...	...	...	37,000	32,000	..	...	69,000	69,000
...	...	...	...	...	...	...	...	...	...	...	...	1,650	...	1,650	9,518
...	...	...	...	...	75	263	...	...	338	...	...	...	...	...	2,402
...	...	...	...	...	...	...	...	...	...	...	9,000	...	...	9,000	9,000
...	...	...	...	...	...	...	...	...	...	...	192,812	201,157	...	393,969	393,969
	.	...	...	...	75	263	...	...	338	37,000	233,812	202,807	...	474,219	499,707
251,282	. .	4,470	...	255,752	...	7,964	...	...	7,964	107,351	...	...	...	107,351	751,122
...	177,614	...	. .	177,614	...	...	...	...	...	...	19,806	976,040	...	995,846	1,173,460
...	...	...	...	...	...	...	...	...	...	31,573	...	...	...	31,573	31,878
...	...	...	...	...	...	...	...	...	...	3,406	...	...	...	3,406	3,435
...	...	...	...	...	...	...	...	...	...	...	460	...	...	460	998
...	...	...	...	...	...	...	...	...	...	21,293	...	...	...	21,293	22,457
251,282	177,614	4,470	...	433,366	...	7,964	...	...	7,964	163,623	20,266	976,040	...	1,159,929	1,983,350
257,718	178,654	4,470	..	440,842	1,142	59,188	...	...	60,330	252,094	506,978	1,563,780	...	2,323,452	3,345,450

Forests.

Forests.

TRACT.

251,349	.	4,470	...	255,819	562	8,454	. .	...	9,016	107,071	...	...	...	107,671	769,445
...	177,614	...	...	177,614	38	...	...	...	38	...	19,806	976,040	..	995,846	1,173,498
...	...	...	...	...	...	...	...	...	. .	109,599	73,250	...	...	182,849	183,187
6,253	1,033	...	...	7,286	467	40,574	...	...	47,041	...	4,317	...	...	4,317	167,882
...	...	...	...	...	..	83	...	...	83	3,406	37,202	1,650	...	42,258	43,003
...	...	...	...	...	75	815	...	...	890	...	460	...	...	460	4,254
...	...	...	...	..	...	1,057	..	...	1,057	..	9,000	...	...	9,000	12,115
116	...	...	...	116	...	2,191	...	...	2,191	29,085	736	...	...	29,821	40,750
...	7	...	...	7	...	14	...	...	14	2,933	362,207	586,090	...	951,230	951,316
257,718	178,654	4,470	...	440,842	1,142	59,188	...	...	60,330	252,094	506,978	1,563,780	...	2,323,452	3,345,450

consumed in producing it being entered in cubic feet, solid.

J. S. GAMBLE,

Conservator of Forests, School Circle, N.-W. P. and Oudh.

Form No. 55.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1891-92.

Division.	Description of produce.	Produce removed or utilised: By Government agency — Quantity.	By Government agency — Value	By purchasers — Quantity.	By purchasers — Value	By free grants — Quantity.	By free grants — Value	By right-holders — Quantity.	By right-holders — Value.	Total — Quantity.	Total — Value.	Remarks.
		No.	Rs	No.	Rs.	No.	Rs	No.	Rs.	No.	Rs	
Debra Dún.	**I.—Reserved Forests.**											
	Bamboos	1,142	113	494,441	3,317	...	...	...	...	495,583	3,430	
	Grazing ..	...	...	...	7,385	...	*1,694	...	...	...	9,079	* Half grazing dues on privilege holders' cattle not realized.
	Fodder grass (head loads, &c)	...	...	2,934	224	...	...	...	...	2,934	224	
	Total ...	...	...	2,934	7,609	...	1,694	...	.	2,934	9,303	
	Lease of limestone ...	...	...	...	1,410	...	...	...	...	...	1,410	
	" hides and horns ...	...	...	...	283	...	...	...	...	...	283	
	" boulders ...	...	...	...	50	...	...	...	...	...	50	
	" thatching grass ...	...	...	...	3,430	...	...	...	...	...	3,430	
	" minor produce ...	...	...	...	156	...	...	...	...	...	156	
	Passes of ditto ..	...	...	...	1,041	...	...	...	...	...	1,041	
	Total ...	...	...	...	6,370	...	...	...	..	...	6,370	
	Total, Debra Dún Division ...	...	113	...	17,291	...	1,694	...	...	...	19,103	
Saháranpur.	Bamboos	...	...	58,260	188	...	...	...	...	58,260	188	
	" (leased) ...	...	...	746,400	4,665	...	...	...	...	746,400	4,665	
	Total ..		...	804,660	4,853	...	...	...	...	804,660	4,853	
	Grazing	...	...	..	16,150	...	*572	...	...	...	16,722	
	Fodder grass (loads, &c.) ...	...	...	...	48	...	...	...	...	...	48	
	Total ...	...	...	..	16,198	...	572	...	...	...	16,770	
	Hides and horns ...	...	...	...	245	...	...	...	...	...	245	
	Honey and wax ...	...	...	...	222	...	...	...	...	...	222	
	Stones	...	...	...	96	...	...	...	...	...	96	
	Chattiwála	...	...	...	412	...	...	...	...	...	412	
	Gums	...	...	...	540	...	...	...	...	...	540	
	Other minor produce ...	...	...	...	1,130	...	...	...	...	...	1,130	
	Lease of ditto	...	...	. .	6,930	..	...	...	...	...	6,930	
	Total ...		.	...	9,575		...	...	...	...	9,575	
	Total, Saháranpur Division ...	...	...	...	30,626	...	572	...		...	31,198	
Jaunsár.	Bamboos	...	...	800	10	150	2	...	...	950	12	
	Bingala	600	6	65,000	41	...	...	...	...	65,600	47	
	Total ...	600	6	65,800	51	150	2	...	...	66,550	59	
	Grazing	...	..	...	2,553	...	4,320	...	...	.	6,873	
	Fodder grass (bundles) ...	3,833	16	...	...	...	2,000	...	...	3,833	2,016	
	Ditto (loads) ...	24	3	320	10	...	...	...	...	344	13	
	Total ...	...	19	...	2,563	...	6,320	...	...	...	8,902	
	Resin (maunds) ...	256	924	...	...	...	...	...	...	231	924	
	Rosin (ditto) ...	208	1,148	...	...	...	...	...	...	208	1,148	
	Turpentine (ditto) ...	35	560	...	...	...	...	...	...	35	560	
	Chir and kail tar (ditto) ...	93	372	...	...	...	...	...	...	93	372	
	Lime (cubic feet) ...	320	120	...	...	...	...	...	...	320	120	
	Ban rope	80	5	...	...	...	...	...	...	80	5	
	Minor produce	...	...	...	340	...	500	...	...	...	840	
	Total ...	...	3,129	...	340	...	500	...	...	...	3,969	
	Total, Jaunsár Division ...	...	3,154	...	2,954	...	6,822	...	...	...	12,930	
	II.—Protected Forests. *Nil.*											
	III.—Unclassed Forests. *Nil.*											
	Abstract for Reserved Forests.											
The Circle.	Bamboos	1,742	119	1,364,901	8,221	150	2	...	...	1,366,793	8,342	
	Grazing dues and fodder grass	...	19	...	26,370	...	8,586	...	...	...	34,975	
	Minor produce	...	3,129	...	16,285	...	500	...		...	19,914	
	Total ...	...	3,267	...	50,876	...	9,088	...	..		63,231	

COMPARATIVE ABSTRACT OF YIELD IN PRODUCE, 1891-92.

Description of produce.	1890-91. Quantity.	1890-91. Value.	1891-92. Quantity.	1891-92. Value	Increase	Decrease.
	C.ft	Rs.	C.ft.	Rs.	Rs.	Rs.
Timber	820,529	3,85,400	950,360	4,22,956	37,556	...
Poles and saplings	83,759		71,629			
Firewood and charcoal	2,314,102	98,529	2,323,452	1,25,539	27,010	...
Bamboos (scores)	86,297	10,551	68,340	8,342	...	2,209
Minor produce	...	22,910	...	19,914	...	2,996
Grazing dues and fodder grass	...	26,864	...	26,389	..	475
Amount of free grazing	...	7,665	...	8,586	921	...
Total ...	...	5,51,919	...	6,11,726	65,487	5,680
			Net increase .		59,807	

DEHRA DÚN:
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form No. 56.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1891-92.

Particulars.	Number or quantity.	Cubic feet.	Total of each head: Number or quantity.	Total of each head: Cubic feet.
BALANCE IN HAND ON 1ST APRIL 1891.				
Dehra Dún. Sál, Sissu logs and pieces ...	145	1,466	145	1,466
Jaunsár. Metre gauge deodár sleepers	122,218	186,469		
Broad gauge deodár sleepers and rai, kail, deodár, oak and tún, &c., timber.	28,620	43,163	150,838	229,632
Firewood and charcoal .	...	15,942	...	15,942
Resin (maunds) ...	209	...	209	
Rosin (ditto) ...	46	...	46	
Turpentine (ditto) ...	46	...	46	
Chír and kail tar (ditto) ...	18	...	18	
Lime	...	23	...	23
Total balance. Timber	...	...	150,988	231,098
Firewood and charcoal ...	...	...	...	15,942
Resin (maunds) ...	...	...	209	
Rosin (ditto) ...	...	...	46	
Turpentine (ditto) ...	...	...	46	
Chír and kail tar (ditto) ...	...	...	18	
Lime	...	...	...	23
RECEIVED FROM THE FORESTS IN DEPÔTS.				
Sál, sissu, tún logs, sál poles, tors karis, sleepers, rollers, pieces, &c	13,033	16,330	...	...
Metre gauge deodár sleepers ..	127,748	199,062	...	...
Broad gauge deodar sleepers, fir, pine deodár, oak, tún, &c., timber.	24,794	18,955	166,175	234,347
Firewood and charcoal ...	...	251,144	...	251,144
Bamboos	512	...	512	
Resin ... (maunds) ...	256-20	...	256-20	
Rosin ... (ditto) ...	208	...	208	
Turpentine (ditto) ...	35-9	...	35-9	
Chír and kail tar (ditto) ...	93-17	...	93-17	
Lime	...	320	...	320
Pula grass (bundles and loads) ...	3,857	...	3,857	
Banrope ... (maunds) ...	80	...	80	
DEPARTMENTAL COLLECTION OF DRIFT TIMBER FROM THE JUMNA AND GANGES.				
Sál, sissu, &c., logs, karis, &c. ...	413	3,120	...	...
Deodár, chír, &c., timber ...	687	1,164	1,100	4,284
Firewood and charcoal ...	...	30,675	...	30,675
Bamboos	630	...	630	
Ringals	600	...	600	

Particulars.	Number or quantity.	Cubic feet.	Total of each head: Number or quantity.	Total of each head: Cubic feet.
REMOVED BY PURCHASERS FROM DEPÔTS.				
Sál karis, bargas, sleepers, logs, poles and saplings, &c.	4,110	4,766		
Broad gauge deodár sleepers, fir, pine, deodár, kail, oak, &c, timber.	12,508	10,479		
Metre gauge deodár sleepers.	103,973	155,959	120,591	171,204
Firewood and charcoal ..	...	130,533	...	130,533
Bamboos	512	...	512	
Rosin (maunds) ...	254	...	254	
Turpentine (maunds) ..	14-6	...	14-6	
Fodder grass (loads, &c)	3,857	...	3,857	
Banrope (maunds) ...	80	...	80	
SOLD LOCALLY.				
Deodár, fir, pine, scantlings.	19,773	33,619	19,773	33,619
Firewood and charcoal ...	...	48,100	...	48,100
DRIFT TIMBER &c.				
Sold locally—				
Sál, sissu, &c., logs, karis, &c.	414	3,400		
Deodár, chír, &c., timber	678	1,150	1,092	4,550
Firewood and charcoal ...	...	39,300	...	39,300
Bamboos	590	...	590	
Ringals	600	...	600	
Resin (maunds) ..	192	...	192	
LOST OR WRITTEN OFF.				
Metre gauge deodár sleepers.	2,752	4,128		
Deodár, fir, pine, &c., scantlings.	783	1,279	3,535	5,407
Firewood and charcoal ..	...	648	...	648
CONVERTED IN DEPÔTS AND TRANSFERRED TO OTHER DIVISIONS.				
Deodár scantlings ...	65	135	65	135
Chír and kail tar (maunds)	26-14	...	26-14	
BY DISTILLATION.				
Resin (maunds) ...	430-34	...	430-34	

[Form No. 56.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1891-92—(*continued*).

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
RECEIVED FROM THE FORESTS AND SOLD LOCALLY.				
Fir, pine, deodár, &c., timber ...	19,773	33,619	19,773	33,619
Firewood and charcoal ...	...	48,100	...	48,100
Resin (maunds)	192	...		
Timber	...	...	338,031	503,348
Firewood and charcoal ...	...	...	...	354,861
Bamboos	...	...	1,142	
Ringals	...	...	600	
Resin (maunds) ...	...	...	657·20	
Rosin (ditto) ...	...	...	254	
Turpentine (ditto) ...	...	...	81·9	
Chír and kail tar (ditto) ..	...	...	111·17	
Lime	...	...	...	343
Fodder grass (loads &c.) ..	...	...	3,857	
Banrope (maunds) ..	...	...	80	

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
USED BY DEPARTMENT.				
Metre gauge deodár sleepers.	39	58		
Deodár, fir, pine scantlings &c.	6,372	5,310		
Sisau, tún logs, &c. ...	33	504		
Sál and kokat poles, &c.	2,109	1,367	8,553	7,329
Firewood	...	2,933	...	2,933
Bamboos	40	...	40	
Rosin (maunds) ...	0-18	...	0-18	
Turpentine (ditto) ...	0-5	...	0-5	
Chír and kail tar (ditto)	4-23	...	4-23	
Lime	...	218	...	218
BALANCE AT CLOSE OF THE YEAR. *Dehra Dún Division.*				
Sál karis, sleepers, bargas, &c.	2,276	2,370		
Drift timber, logs, &c. ...	137	1,146	2,413	3,516
Firewood	...	375	...	375
SAHÁRANPUR DIVISION.				
Sal, &c., poles ...	4,952	7,206	4,952	7,206
JAUNSÁR DIVISION.				
Metre gauge deodár sleepers	143,202	225,386		
Broad gauge deodár sleepers, fir, pine, deodár tún, &c., timber.	33,855	44,996	177,057	270,382
Firewood and charcoal ...	...	132,972	...	132,972
Rosin (maunds) ...	34·8	...	34·8	
Turpentine (ditto) ...	66·38	...	66·38	
Chír and kail tar (ditto)	80·20	...	80·20	
Lime	...	125	...	125
Total balance: Timber ..	...	...	184,422	281,104
Total balance: Firewood and charcoal.	...	...	...	133,347
Total balance: Rosin (maunds) ...	...	...	34·8	
Total balance: Turpentine (ditto) ...	...	...	66·38	
Total balance: Chír and kail tar (do.)	...	...	80·20	
Total balance: Lime ...	...	...	.	125
Grand Total: Timber ...	...	...	338,031	503,348
Grand Total: Firewood and charcoal.	...	...	...	354,861
Grand Total: Bamboos ...	...	...	1,142	
Grand Total: Ringals ...	...	...	600	
Grand Total: Rosin (maunds) ...	...	...	657·20	
Grand Total: Rosin (ditto) ..	...	...	254	
Grand Total: Turpentine (ditto) ..	...	...	81·9	
Grand Total: Chír and kail tar (do.)	...	...	111·17	
Grand Total: Lime ..	...	...	...	343
Grand Total: Fodder grass (loads, &c).	...	...	3,857	
Grand Total: Banrope (maunds) ...	...	...	80	

[Form No. 56.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1891-92—(*concluded*).

Particulars.	Number or quantity.	Cubic feet	Total of each head		Particulars.	Number o quantity	Cubic feet.	Total of each head.	
			Number or quantity.	Cubic feet.				Number or quantity.	Cubic feet.
ABSTRACT.									
TIMBER INCLUDING DRIFT									
Balance at commencement of the year	...	231,008	...		Removed by purchasers from depôts	...	171,204	...	
Received from the forests during the year.	...	234,347	...		Sold locally ...	...	33,611	...	
Received from the departmental collection of drift timber from the Ganges and Jumna	..	4,284	...		Ditto (drift wood) ...	...	4,551	...	
Received from the forests and sold locally.	...	33,619	...		Lost or written off ..	...	5,407	...	
					Converted to other classes and transferred to other Divisions.	...	135	...	
					Used by Department ...	...	7,329		
				503,348	Balance at close of the year.	...	281,104	...	503,348
FIREWOOD.									
Balance at commencement of the year	...	15,942	...		Removed from depôts by purchasers.	...	130,533	...	
Received from the forests during the year.–	...	251,144	...		Sold locally ...	...	48,100	...	
Collection of drift wood from the Ganges and Jumna.	...	30,675	...		Ditto (drift wood) ...	...	39,300	...	
Received from the forests and sold locally.	...	48,100	...		Lost or written off ...	...	648	...	
					Used by department ...	...	2,932	...	
				354,861	Balance at close of the year.	...	133,347	...	354,861
BAMBOOS AND RINGALS.									
Received from the forests during the year.	512	...			Removed from depôts by purchaser	512	...	...	
Collected from the Ganges and confiscated.	1,230	...			Sold locally (drift, &c.)...	1,190	...		
			1,742		Used by Department ...	40	...	1,742	
MISCELLANEOUS PRODUCE.									
Resin—(maunds).									
Balance at commencement of the year.	209	...			Sold locally (maunds) ...	192	...		
Received from the forests during the year.	255-20	...			By distillation (do). ...	430-34	...	...	
Received from the forests and sold locally.	192	...			Used by Department (do.)	0-18	...		
			657-20		Balance at close of the year (ditto).	34-8	...	657-20	
Rosin—(maunds).									
Balance at commencement of the year.	46				emoved from depôts by purchasers (maunds).	254	...	254	
Received from the forests during the year.	208	...							
			254						
Turpentine—(maunds).									
Balance at commencement of the year.	46				Removed from depôts by purchasers (maunds).	14-6	...	...	
Received from the forests during the year.	35-9	...			Used by Department (do.)	0-5	...	...	
			81-9		Balance at close of the year (ditto).	66-38	...	81-9	
Chir and kail tar—(maunds).									
Balance at commencement of the year.	18	...			Transferred to other Divisions (maunds).	26-14	...	...	
Received from the forests during the year.	93-17	...			Used by department (do.)	4-23	...	...	
			111-17		Balance at close of the year (ditto).	80-20	...	111-17	
Lime.									
Balance at commencement of the year	...	23			Used by Department	...	218	...	...
Received from the forests during the year.	...	320	...		Balance at close of the year.	...	125	...	343
				343					
Fodder grass (loads, &c).									
Received from the forests during the year.	3,857	...	3,857		Removed from depôts by purchasers.	3,857	...	3,857	
Bauropa—(maunds).									
Received from the forests during the year.	80	...	80		Removed from depôts by purchasers (maunds).	80	...	80	

DEHRA DÚN:
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form 57A.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1891-92.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favor of the year.	Against the year.	
Dehra Dún Division.			Rs.			Rs.	Rs.	Rs.	
Sál scantlings	...	...	...	1,970	1,649	458	458	...	
„ sleepers	...	...	...	283	484	170	170	...	
„ rollers	...	...	...	11	141	55	55	...	
Drift logs, pieces, &c.	145	1,466	450	149	1,242	344	...	106	
Ditto, firewood	...	...	...	...	375	23	23	...	
Total ...	...	...	450	...	...	1,050	706	106	
Saharánpur Division.									
Sál timber, poles, &c.	...	...	...	4,952	7,206	800	800	...	
Total ...	...	...	...	...	...	800	800	...	
Jaunsár Division.									
Broad gauge deodár sleepers	5	20	10	4	16	8	...	2	
Metre ditto ditto	122,218	186,469	1,27,405	143,202	225,386	2,14,808	77,308	...	
Deodár, fir, kail, tún, fancy wood, and miscellaneous timber, *including drift.*	28,615	43,143	18,995	33,851	44,980	20,023	10,028	...	
Firewood and charcoal	...	14,788	2,806	...	129,146	24,538	21,732	...	
Ditto (loads)	...	1,154	108	...	3,826	358	250	...	
Pine resin (maunds)	209	...	939	34	...	153	...	786	
Rosin ... (ditto)	46	...	253	.	...	...	...	253	
Turpentine (ditto)	46	...	736	67	...	1,072	336	...	
Chír and kail tar (ditto)	18	...	54	80	...	240	186	...	
Lime	...	23	8	...	125	46	38	...	
Total ...	...	...	1,61,404	...	...	2,70,841	1,10,478	1,041	
GRAND TOTAL ...	..	...	1,61,854	...	...	2,72,691	1,11,984	1,147	

Net difference in favor of the year, Rs. 1,10,837.

DEHRA DÚN:
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form No. 57B.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1891-92.

Description of timber and other produce.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number.	Value.	Number.	Value.	In favor of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
Direction Division.						
Office furniture	57	750	57	750	...	...
Tents	7	600	7	550	...	50
Buildings and building materials	2	2,300	2	2,300	...	...
Miscellaneous	27	235	27	238	3	...
Elephant	1	2,700	1	2,600	...	100
Total ...	...	6,585	...	6,438	3	150
Dehra Dun Division.						
Surveying and other instruments	72	411	62	409	...	2
Tools	1,709	938	1,662	1,060	122	...
Office furniture	394	945	420	952	7	...
Tents	14	172	12	244	72	...
Buildings and building materials	101	19,630	105	19,462	...	168
Miscellaneous	499	852	507	952	100	...
Elephant	1	1,600	1	1,520	...	80
Total ...	...	24,548	...	24,599	301	250
Saharanpur Division.						
Surveying and other instruments	16	115	14	108	...	7
Machinery	12	41	4	38	...	3
Tools	825	371	847	468	97	...
Office furniture	209	1,334	207	1,430	96	...
Tents	7	487	6	481	...	6
Building and building materials	54	11,282	56	12,945	1,663	...
Miscellaneous	425	1,409	410	1,313	...	96
Elephant	1	2,300	1	2,300	...	...
Total ...	...	17,339	...	19,083	1,856	112
Jaunsar Division.						
Surveying and other instruments	55	563	49	526	...	37
Machinery	9	149	8	141	...	8
Tools	2,287	2,504	2,311	2,784	280	...
Office furniture	63	505	71	568	63	...
Tents	9	262	9	278	16	...
Buildings and building materials	412	45,293	314	45,378	85	...
Miscellaneous	3,240	808	2,770	702	...	106
Total ...	...	50,084	...	50,377	444	151
GRAND TOTAL ...	...	98,556	...	1,00,497	2,604	663

Net difference in favor of the year, Rs. 1,941.

DEHRA DÚN:
The 21st June 1892.

J. S. GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH.

ABSTRACT OF STOCK ACCOUNT, 1891-92.

Description of material, &c.	On hand at the commencement of the year.										On hand at close of the year.										Increase or decrease in value on 31st March 1892.				
	Dehra Dún.		Saháranpur.		Jaunsár.		Direction.		Total.		Dehra Dún.		Saháranpur.		Jaunsár.		Direction.		Total.		Dehra Dún.	Saháranpur.	Jaunsár.	Direction.	Total.
	Cubic feet.	Value.	Cubic feet.	Value	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.					
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Timber ...	1,466	450	...	...	229,632	1,56,500	..	...	231,098	1,56,950	3,516	1,027	7,206	800	270,382	2,44,434	...	...	281,104	2,46,261	+577	+800	+87,934	...	+89,311
Firewood and charcoal	...	...	...	...	15,942	2,914	..	...	15,942	2,914	375	22	...	...	132,972	24,890	..	...	133,347	24,919	+23	...	+21,983	...	+22,006
Minor produce ...	...	...	...	...	...	1,990	...	...	...	1,990	...	...	...	...	...	1,511	.	...	...	1,511	...	...	−479	...	−479
Total ...	1,466	450	...	...	245,574	1,61,404	...	...	247,040	1,61,854	3,891	1,050	7,206	800	403,354	2,70,847	..	...	424,417	2,72,691	+600	+800	+1,09,437	...	+1,10,837
Live stock ...	...	1,600	...	2,300	...	...	...	2,700	...	6,600	...	1,520	...	2,300	...	...	...	2,600	...	6,420	−80	...	...	−100	−180
Dead stock, including buildings, furnitures, &c.	...	22,948	...	15,029	...	50,084	...	3,885	...	91,956	...	23,079	...	16,783	...	50,377	..	3,838	...	94,077	+131	+1,744	+29	−47	+2,121
Total ...	...	24,548	...	17,329	...	50,084	.	6,585	...	98,556	...	24,599	...	19,083	...	50,377		6,438	...	1,00,497	+51	+1,744	+293	−147	+1,941
GRAND TOTAL ..	...	24,998	...	17,339	...	2,11,488	...	6,585	...	2,60,410	...	25,649	...	19,883	...	3,21,218	..	6,438	...	3,73,188	+651	+2,544	+1,09,730	−147	+1,12,778

DEHRA DÚN:
The 21st June 1892.

J. S GAMBLE,
Conservator of Forests, School Circle, N.-W. P. and Oudh.

[Form No. 58.

FOREST DEPARTMENT, SCHOOL CIRCLE, N W PROVINCES AND OUDH

SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS, 1891-92.

Budget Heads	Direction	Dehra Dún Division	Saháranpur Division	Jaunsar Division	Total.
RECEIPTS	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
I —TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—					
a Timber ..		2,114 9 6	.	1,85,317 8 10	1,87,432 2 4
b Firewood and charcoal		776 11 6	1,220 0 0	18,260 3 4	20,256 14 10
c Bamboos	...	108 5 6	..	..	108 5 6
d Sandal-wood	...				
e Grass and other minor produce	.			2,598 5 5	2,598 5 5
II —TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS					
a Timber		47,480 3 6	3,143 7 4	37,602 1 9	88,234 12 7
b Firewood and charcoal	.	3,783 8 3	3,175 5 0	521 14 0	7,480 11 3
c Bamboos ...	..	3,316 12 3	4,853 2 9	50 10 0	8,220 9 0
d Grazing and fodder grass	...	8,884 8 0	22,742 4 1	2,503 1 6	34,189 13 7
e Other minor produce ..	...	7,030 3 0	9,290 15 3	340 0 0	16,670 2 3
III —CONFISCATED DRIFT AND WAIF WOOD ...	...	2,657 11 8	...	1,301 0 3	3,958 11 11
IV.—REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—					
a Duty on foreign timber and other forest produce	...		...	8,178 14 11	8,178 14 11
b Revenue from shared and private forests ..		..	..		...
V —MISCELLANEOUS—					
a, Fines and forfeitures ...	..	...	3 6 0	5 0 0	8 6 0
b Refunds	552 4 11			50 7 2	602 12 1
c Other sources	218 8 3	447 9 9	442 2 8	13,914 13 4	15,023 2 0
TOTAL, RECEIPTS .	770 13 2	76,600 2 11	44,879 11 1	2,70,704 0 0	3,92,953 11 8
A.—CONSERVANCY AND WORKS.					
I —TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY—					
a, Timber . .	...	1,153 2 9	608 7 10	85,934 2 1	87,695 12 8
b Firewood and charcoal	...	165 14 0	611 2 0	16,626 11 1	17,403 11 10
c Bamboos .	...	44 5 10	.	..	44 5 10
d Sandal wood ...	..				
e Grass and other minor produce	...			2,304 9 4	2,304 9 4
II —TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY CONSUMERS OR PURCHASERS	...	1,529 14 4	1,527 13 6	53 15 0	3,111 10 10
III —CONFISCATED DRIFT AND WAIF WOOD		1,065 2 3	1 4 0	612 12 5	1,679 2 8
IV —REVENUE FROM FORESTS NOT MANAGED BY GOVERNMENT—					
a Duty on foreign timber and other forest produce	.	..	...	1,778 0 5	1,778 0 5
b Revenue from shared and private forests ..		...		.	...
V —RENT OF LEASED FORESTS AND PAYMENTS TO SHAREHOLDERS IN FORESTS MANAGED BY GOVERNMENT	.	1,404 0 0	...	11,150 0 0	12,554 0 0
VI. -LIVE STOCK, STORES, TOOLS AND PLANT—					
a Purchase of cattle ..					
b Feed and keep of cattle	641 10 9	628 0 4	648 5 2		1,913 0 3
c, Stores, tools and plant ...	3 0 0	654 10 9	384 5 6	837 2 3	1,879 2 6

[Form No. 58.

FOREST DEPARTMENT, SCHOOL CIRCLE, N.-W. PROVINCES AND OUDH

SUMMARY OF EXPENDITURE OF THE DIFFERENT DIVISIONS, 1891-92

Budget Heads.	Direction	Dehra Dún Division	Sahéranpur Division	Jaunsár Division	Total.
	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
VII.—COMMUNICATIONS AND BUILDINGS—					
a Roads and bridges		2,076 1 10	619 10 4	6,463 13 8	10,059 9 10
b Buildings	89 13 8	2,147 0 2	2,201 9 3	4,752 5 0	9,190 12 1
c Other works ...	..	366 6 7	489 10 6	224 13 3	1,080 14 4
VIII.—DEMARCATION, IMPROVEMENT AND EXTENSION OF FORESTS—					
a Demarcation	...	1,334 0 8	933 15 7	1,871 9 0	4,139 9 3
b Compensation for land and rights .	.			125 8 7	125 8 7
c Surveys and working plans ..	13 8 0			156 9 0	170 1 0
d Plantations	..	1,019 8 1	436 4 0	2,503 4 6	3,959 0 7
e Protection from fire		2,492 12 7	1,320 7 7	1,396 6 11	5,209 11 1
f Other works		5,461 13 11	686 0 6	1,061 6 6	7,209 4 11
IX.—MISCELLANEOUS—					
a Refunds	...		2 7 8	3,697 2 1	3,699 9 9
b Law charges		0 2 0	2 10 0	11 8 0	14 4 0
c Other charges	182 8 6	304 0 5	305 0 9	4,923 3 3	5,714 12 11
Total, A.—Conservancy and works	930 8 11	22,742 1 3	10,770 2 2	1,46,484 14 4	1,80,936 10 8
B.—ESTABLISHMENTS.					
I.—SALARIES—					
a Conservators	19,757 7 3				19,757 7 3
b Superior officers	...	12,770 2 10	7,886 10 8	10,898 11 8	31,555 9 2
c Subordinate forest and depôt establishments	.	8,677 0 9	6,989 3 6	7,581 4 11	23,147 9 2
d Office establishments	3,569 2 0	2,298 12 0	1,537 12 11	2,465 15 4	9,871 10 3
e. Deputation and special allowances ...		.			
II.—TRAVELLING ALLOWANCES—					
a Conservators	1,160 0 0	...	..		1,160 0 0
b Superior officers ..		1,380 8 0	1,048 14 0	919 8 0	3,298 14 0
c Subordinate forest and depôt establishments		872 8 10	509 8 9	832 1 11	2,214 3 6
d Office establishments .	112 8 8	124 9 0	92 8 0	17 6 8	347 0 4
III.—CONTINGENCIES—					
a Stationery .	26 0 0	129 3 3	127 5 6	48 15 6	331 8 3
b Carriage of tents and records	280 7 7	541 2 5	403 13 0	670 12 9	1,896 4 9
c Rents rates and taxes ...	...	360 0 0	14 7 0	13 1 0	387 8 6
d Pay of police guards					
e Official postage	103 9 6	114 8 6	85 13 6	106 2 6	410 2 0
f Sundries	1,053 14 7	482 3 5	202 15 0	663 7 9	2,402 8 9
TOTAL, B.—ESTABLISHMENTS ...	26,063 1 7	27,600 11 0	18,808 15 10	24,217 8 6	96,780 4 11
GRAND TOTAL OF EXPENDITURE	26,993 10 6	50,342 12 3	29,678 2 0	1,70,702 6 10	2,77,716 15 7

CALCUTTA,
The 21st June 1892

J. BRIDGNELL,
Chief Superintendent, Forest Accounts Branch.

[Form No 59.

FOREST DEPARTMENT, SCHOOL CIRCLE, N-W PROVINCES AND OUDH

DR. ACCOUNT CURRENT FOR THE YEAR 1891-92. CR.

	Rs a p	Rs a p		Rs a p	Rs. p
To Cash Balance	...	180 5 5	By Expenditure as per Annual Summary, Form No. 58	...	2,77,716 15 7
„ VIII—Assessed Taxes—					
Income Tax—Deductions from salaries	.	1,542 14 7	„ Deposits ..	...	1,361 0 0
„ Revenue as per Annual Summary, Form No. 58 ..		3,92,063 11 8	„ Forest Cash Remittances—Local—		
„ Service Funds—					
Civil Fund—Ordinary, Bengal	...	.	Remittances to Treasuries ..	1,97,855 1 1	
„ Additional, Bengal	.		Inter-Divisional Transfers	1,129 4 8	1,98,984 5 9
Military Fund—Bengal ...		.			
„ „ Madras ...	...		„ Advances Recoverable .	...	1,05,396 8 0
„ Orphan Fund—Bengal ..	...	...			
Uncovenanted Service Family Pension Fund—Bengal ...	...	...	„ Suspense	...	...
General Family Pension Fund	..	..	„ Account Current (other Governments)—		
Hindu Family Annuity Fund ..	...	...			
„ Deposits ...		716 0 0	Remittances to the Government of India / Punjab	1,604 13 9 / 6,500 0 0	8,104 13 9
„ Forest Cash Remittances—Local—					
Forest cheques drawn ...	2,77,074 4 11		„ Inter-Departmental Transfers—		
Inter-Divisional Transfers ...	625 8 3	2,78,599 13 2	Guaranteed Railway ..	...	...
„ Advances recoverable	...	1,58,377 12 11			
„ Suspense	...	...	Bombay, Baroda and Central India Railway Company...	1,59,042 15 0	..
„ Account Current (other Governments)—					
Remittances from Government of India / Madras	3,977 13 4 / 19 15 3	3,997 12 7	„ Public Works Department—Ordinary Branches ...	15,417 10 3	...
„ Inter-Departmental Transfers—			„ Military Department—Bengal	15,946 8 1	...
„ Public Works Department—Ordinary Branches	5,456 0 8	...			
Military Department ..	...		„ Civil Department—		
„ Civil Department—			Miscellaneous	94 8 0	1,90,501 9 4
Jail	..	...			
Mathematical Instrument Department ..	...		„ Cash Balance	...	100 0 3
Miscellaneous	390 13 [illegible]	5,846 14 4			
Total ..	...	8,42,225 4 8	Total .	.	8,42,225 4 8

CALCUTTA:
The 21st June 1892.

J. BRIDGNELL,
Chief Superintendent, Forest Accounts Branch

[Form No. 60.

FOREST DEPARTMENT, SCHOOL CIRCLE N W PROVINCES AND OUDH

REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1891-92.

Division.	Particulars	Outstandings at commencement of year	Value of sales and other revenue during year	Total	Amount realized during year	Balance due to the Department at end of year	Remarks
		Rs a p	Rs a p	Rs a p	Rs a. p	Rs a p	
Direction ..	Sale proceeds of timber and other produce		770 13 2	770 13 2	770 13 2	...	
Dehra Dun .	Ditto .	24,354 4 3	66,430 10 11	90,784 15 2	76,609 2 11	14,175 12 3	*Includes Rs 350 written off (*vide* G O No 387b dated 6th May 1891 and G O No 704b dated 17th October 1891)
Saharanpur .	Ditto	7 318 12 3	38 610 3 0	45 929 0 0	*45,429 11 1	499 4 11	
Jaunsar	Ditto	25,587 13 1	2,78,324 0 7	3,03,911 13 8	†2,70,941 14 6	32,969 15 2	†Includes Rs 297 4 0 written off (*vide* G O No $\frac{500F}{1891A\ 2}$ dated 1st August 1891)
	Total ...	57 260 18 7	3,84 185 12 5	4,41,396 10 0	3,94,751 9 8	47,645 0 4	

DEHRA DÚN
The 21st June 1892

J S GAMBLE,
Conservator of Forests, School Circle, N W P and Oudh

[Form No. 61.

FOREST DEPARTMENT, SCHOOL CIRCLE, N W PROVINCES AND OUDH

OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1891-92

Division	Department debtor			Department creditor			Balance due	
	At commencement of year	Recoveries in cash and value of supplies and work done during the year	At close of year	At commencement of year	Payments made during year	At close of year.	To Department (outstandings)	By Department (liabilities)
	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p
Direction	6 8 0	1 699 12 8	1,706 4 8	79 4 2	1,690 8 0	1,769 12 2	70 0 0	6 8 6
Dehra Dún		32,002 7 5	32 002 7 5	1 438 7 0	32 404 1 10	33 842 8 10	1 840 1 5	..
Saharanpur		9,079 14 1	9 079 14 1	522 9 8	10 142 13 11	10 665 7 2	1 585 9 1	.
Jaunsar		1,15,595 10 9	1,15,595 10 9	21,852 4 9	1,21,159 0 3	1,43,011 5 0	27,415 10 3	
Total	6 8 0	1,58,377 12 11	1,58,384 4 11	23,892 9 2	1,65 396 8 0	1,89,289 1 2	30 911 4 9	6 8 6

CALCUTTA
The 21st June 1892

J BRIDGEFELL,
Chief Superintendent Forest Accounts Branch

[Form No 62.

FOREST DEPARTMENT, SCHOOL CIRCLE, N W PROVINCES AND OUDH

FINANCIAL RESULTS OF THE YEAR 1891-92.

Division	Timber and other produce removed from the forests by Government Agency		Other revenue		Formation, protection and improvement of forests	Total	
	Receipts	Charges	Receipts	Charges	Charges	Receipts	Charges
	Rs	Rs	Rs	Rs	Rs	Rs	Rs
Dehra Dun	4 340	6,525	72 500	16,337	35 578	76 840	58 440
Sahāranpur ..	1,220	3 827	43,737	10,615	17,935	44 957	32,377
Jaunsár	2,07,477	1 47 235	63,690	11,921	27,744	2,71,167	1 86,900
Total	2,13,037	1,57,587	1,79,927	38,873	81,257	3,92,964	2 77,717

DEHRA DÚN
The 21st June 1892.

J S GAMBLE,
Conservator of Forests, School Circle, N-W P and Oudh.

ORDERS OF GOVERNMENT.

No. $\frac{854F.}{459A-15}$ OF 1892.

RESOLUTION.

REVENUE (FORESTS) DEPARTMENT.

Dated Naini Tal, the 26th September 1892.

READ—

Annual Progress Reports of the Administration of the Forest Department, North-Western Provinces and Oudh, for the year ending 31st March 1892.

OBSERVATIONS.—The volume containing the reports of the three Circles was received from the Government Press on the 18th August, a considerable improvement on previous years. The reports of the School and Oudh Circles are dated respectively the 21st June and the 7th July, but the reports on fire conservancy are dealt with separately in appendices which were forwarded to the Press on the 21st and the 23rd July. The Central Circle report is dated the 16th July, but the results of the fire conservancy operations are reported in the body of the report. The adoption of a forest year ending with the 30th June has now been prescribed by the Government of India in their Circular No. 16F., dated 7th June 1892. This will obviate the necessity for separate appendices relating to fire conservancy operations, and the preparation of the annual report will not in future interfere with Divisional Officers' work in the forests. As the reports will be written at a time when out-door work is impossible, there should be no difficulty in their submission on the dates fixed.

2. Mr. J. S. Gamble remained throughout the year in charge of the School Circle. Mr. Shakespear held charge of the Oudh Circle as a temporary arrangement from the 1st May, when Captain Wood retired, till he was relieved on the 4th August by Mr. S. Eardley-Wilmot, who had made over charge of the Central Circle to the late Mr. D'Arcy, who remained in charge for the rest of the year. Mr. A. E. Wild, however, is responsible for the annual report, having assumed charge of the Circle after Mr. D'Arcy's death on the 3rd April 1892.

Area of reserved forests in square miles.

Circle.	1st April 1891.	31st March 1892.
Central	1,598	1,733
Oudh	1,204	1,237
School	800*	799*
Total ...	3,602	3,769

* Includes 78 square miles of leased forest.

3. *Areas.*—The area of the reserved forests in square miles at the beginning and at the close of the year are compared in the margin.

In the Central Circle the area of the reserved forests shows an increase of 135 square miles. Thirty-three square miles of this increase are, however, nominal only, being due to a recalculation of the areas of the forests in the Ganges Division. Sixteen square miles of district forest known as the Dolmar-Mora forests were reserved, mainly with a view to meet the demands of the Naini Tal Settlement. In the Bundelkhand Division 86 square miles of unclassed forests were formally notified as

reserved forests. The increase of 33 square miles in the Oudh Circle is mainly due to the correction of errors in the previous returns. Five square miles which have been placed under the charge of the Forest Department, in the Pilibhít and Bahraich districts, are shown as unclassed forests, pending their formal gazettement as reserved forests. The area of the Oudh Circle, however, is only known approximately; the necessity for more accurate information with a view to the more systematic working of the forests and the preparation of working plans has been recognised, and the Lieutenant-Governor has gladly availed himself of the offer of the Government of India that the survey of these forests should be commenced next cold weather by the Forest Survey Department. There was little change in the area of reserved forests in the School Circle.

4. In paragraph 3 of their letter No. 138F., dated 5th February 1892, the Government of India asked that in future the reports should contain full information regarding all forest and pasture lands still at the disposal of the State, but not yet brought under the provisions of the Forest Act. The Conservator of the School Circle reports that he has as yet been unable to collect the necessary information for his Circle, but promises that the subject shall receive his attention during the present year. In the Central Circle there are approximately 3,428 square miles of forests, the property of the State, not under the charge of the Forest Department. It is not at present deemed necessary or advisable to formally reserve these forests, which are spread over more or less inaccessible hills. It has however been brought to the notice of Government that the forests have in some cases suffered considerably from khil cultivation, and in the interests of the villagers it has been decided to bring portions of those forests, where the results of the fluctuating cultivation have been most serious, under the provisions of Chapter IV of the Forest Act. The rules which it will then be possible to introduce will, it is trusted, suffice to prevent the destruction of the forests actually concerned, and the action taken will serve as a warning to the villages in the rest of the Division, and make the people more amenable to the instructions of the District Magistrate. The Commissioner of Kumaun has still under consideration the list of pattis in which action is most urgently required. The Conservator of the Oudh Circle reports that in the Lucknow and Fyzabad Civil Divisions there are 16 square miles of forests, the property of the State, managed by District Officers. He suggests that these areas should be reserved, but be left under the management of the district authorities. This question will be considered when the report by the Board of Revenue is received on the questions raised in the Circular of the Government of India, No. $\frac{17F.}{105}$, dated 15th July 1891, with regard to the classification of waste lands into forests, fuel and fodder reserves and pasture lands. It will then also be possible to give full information as to the waste lands still at the disposal of the State, and to arrive at a decision as to their future treatment. The area of forest and pasture land in Kheri under the District Officer has been under-estimated by the Conservator. There are in that district, according to a statement furnished by the Deputy

Commissioner, 12,366 acres of forest land and 9,759 acres of pasture land. A considerable portion of this land was for a time under the charge of the Forest Department, but was restored to the district authorities owing to its small value for forest purposes. The Lieutenant-Governor has now under his consideration an application from Mr. L. Hearsey, a landholder in the Kheri District, to be allowed to bring 16,016 acres under cultivation.

5. Besides the reserved forests there are also under the administration of the Forest Department 147 square miles of protected and unclassed forests as shown in the margin. The area of unclassed forests has been largely reduced by the reservation of 86 square miles in Bánda. The remaining 35 square miles of unclassed forests in the Central Circle consist almost entirely of forests in which zamindárs hold proprietary rights, but which are held by Government on a perpetual lease subject to the proprietors' rights to timber, fuel and grazing for their agricultural and domestic requirements and to the payment to them of 45 per cent. of the net revenue. The proprietary right in these forests will be acquired as opportunity occurs, when they also will be formally reserved. The five square miles now shown as unclassed forests in the Oudh Circle is forest land which has been made over to the Forest Department, but which has not yet been finally notified as reserved forest.

Area of protected and unclassed forests.

Circle.	Protected.	Unclassed.
Central	98	35
Oudh		5
School		14

6. *Boundaries.*—In the Central Circle Rs. 620 were spent on the maintenance of existing boundaries and Rs. 1,234 on new works, the most important of which was the erection of 547 new pillars in the Jhánsi and Bánda ranges. In the Oudh Circle only Rs. 543 were expended on demarcation, but the Conservator points out that most of the boundaries are marked only by mounds of earth and wooden posts. He urges that the operations of the Forest Survey Branch should be accompanied by the erection of numbered masonry pillars. This will be an expensive operation, but without it the survey will lose much of its value; and the Lieutenant-Governor admits the propriety of permanently demarcating the boundary at the time it is surveyed. The Conservator will be asked to submit the question separately for the orders of Government. He should report what boundaries are properly and permanently demarcated, and over what length of boundary it will be necessary to substitute masonry pillars or monoliths for the present temporary erections together with an estimate of the probable cost. Proposals have been submitted by the Conservator for exchanges of portions of Government forest for land, the property of the Balrámpur and Khairagarh estates, with a view to simplifying forest boundary and facilitating fire protection by the consolidation of the forests. These proposals have been accepted in principle both by Government and by the two estates: there only remains to work out the details. In the School Circle the Conservator promises to take up the question of clearing the boundary lines of the forests in the Jaunsár Division.

7. *Surveys, Working Plans, &c.*—The expenditure on surveys and working plans in each Circle is compared below with that of the previous year :—

Circles.	1890-91.	1891-92.
	Rs.	Rs.
Central	1,453	1,590
Oudh	209	430
School	189	170
Total ...	1,851	2,190

The expenditure in the Central Circle represents work done departmentally, and was mainly incurred in bringing the existing maps up to date. In addition to this however the survey of the Lansdowne reserve was completed by the Survey of India. The expenditure of the year on this account, amounting to Rs. 2,851, does not appear to have been as yet debited to the Department. It has already been stated that the survey of the Oudh forests is contemplated. No new working plans were sanctioned during the year, but a scheme for working the bamboo forests in the Central Circle by area on a two years' rotation has been sanctioned. To facilitate the preparation of working plans in the Central Circle Mr. Osmaston was appointed working plans officer, while two officers were engaged on preparing stock maps. Unfortunately the departure of Mr. Down on furlough necessitated the reversion of Mr. Osmaston to the charge of a division, and the only plan which has been completed was that for the Lansdowne reserve which was urgently required to regulate the supply of fuel to the neighbouring cantonment. It is understood that this plan has been submitted to the Inspector-General of Forests for his professional opinion. The Lieutenant-Governor intends to post a working plans officer to this Circle during the coming cold weather. Experience has shown that most of the existing plans are in need of revision. In some cases owing to absence of sufficiently exact information at the time they were prepared, as to the stock on the ground or as to the demand for timber, the working plans contain provisions which cannot be carried out; in other cases, an unexpected change in the demand, such as may be caused by the opening up of communications, requires certain modifications in the system of working prescribed by the plans. The Conservator promised to submit proposals, but the work was stopped by the death of Mr. D'Arcy. It is trusted that the necessary revisions will be made this season by the Divisional Officers.

8. As was noted last year, considerable deviations from the provisions of the plans both of the School and the Central Circles were pointed out by the Assistant Inspector-General of Forests. Conservators were called upon for explanations. In some cases the necessity for the deviations was satisfactorily shown, but this did not justisfy Divisional Officers in departing from the directions prescribed in the plan without first obtaining the sanction of the Local Government. In other cases the deviations could not be satisfactorily explained, and they can only be ascribed to a neglect of the orders of Government and of the

provisions of the Forest Code. It is unsatisfactory that the omission of Divisional Officers to carry out the provisions of the working plans should have escaped the notice of Conservators.

9. In the Oudh Circle the working plan for the Kheri sál forests, which has been the subject of much discussion, has now nearly been completed by the Conservator; and the revision of the draft Gorakhpur working plan, which has not met with the professional approval of the Inspector-General of Forests, will be undertaken next cold weather. Working plans are urgently required for the other important forests of this Circle, which have recently been opened up by railways, and if possible a working plans officer will also be appointed to this Circle during the cold weather. Temporary plans might be drawn up for those forests which cannot at first be taken up by the working plans officer. It is very necessary that the working of these forests should be more systematic than it has been in the past.

10. In addition to the settlement operations consequent on the reservation of fresh areas, it has been found necessary to define the rights exercised in the reserved forests of the Kumaun Division. These forests were originally notified as reserved under section 34 of the Forest Act, when only a rough record of the rights admitted was framed. A Deputy Collector has now been placed on special duty to specify and define the extent of the rights to be exercised.

11. *Establishment.*—The Bánda, Jhánsi and Lalitpur Divisions, which had hitherto been under the charge of the District Officers with the powers of Forest Officers, have been amalgamated into one Division, called the Bundelkhand Division, and have been placed under the charge of an officer of the Forest Department as Divisional Officer. The Bhira Division, which has hitherto been under the charge of the Pilibhít Divisional Officer, has been amalgamated with the Kheri Division. At the close of the year there were in the Central Circle four Rangers and nine Foresters holding certificates from the Forest School. The services of Mr. Martin have however been placed at the disposal of the Government of India for appointment as Extra Assistant Conservator in Berar, and Mr. Ryan has been promoted in a vacancy in these Provinces. This has reduced the number of trained Rangers to two. Two Foresters were deputed to the School in 1891, and two probationers have been granted stipends and sent to the School this year. The subordinate service in this Circle is well reported on by the Divisional Officers. The Conservator of the School Circle gives no information in his report as to the number of trained Rangers and Foresters in his Circle, but from a return recently received it appears that nine out of the ten Rangers in the Circle and the four Foresters in charge of ranges hold Forest School certificates. The Conservator will be asked to report how many of the remaining six Foresters are trained men. The subordinate staff in the School Circle is said to have worked well. In this respect the report of the Oudh Circle is less satisfactory: 26 men were dismissed, one resigned, and one was prosecuted for embezzlement; while the irregularities in the accounts of the Bahramghát

Depôt have led to the Superintendent's reversion to the clerical establishment. The Conservator attributes the want of discipline and laxness in work to the inferior class of men from whom the Foresters have been recruited, while the want of technical training is evident from the fact that the staff included only three Rangers and one Forester trained at the Forest School, and although two candidates nominated by the Oudh Conservator have this year been sent to the School, none were sent to Dehra last year. The question of strengthening the subordinate establishment by the transfer of trained men from one of the other Circles will receive the attention of Government. The Conservator of the School Circle complains that two trained Rangers in his Circle have been transferred to the Oudh Circle. The establishment in the Oudh Circle was very weak, and the appointment of two Extra Assistant Conservators for that Circle was specially sanctioned by the Government of India; at the same time in order to fill these appointments the sanction of the Government of India was requested to the appointment of two candidates under section 35(2)*(a)* of the Forest Code. In reply, the Government of India intimated that the sanction asked for could only be accorded, provided there were in the Province no trained Rangers qualified for promotion under the first clause of section 35. The only Rangers so qualified belonged to the School Circle, and in accordance with the orders of the Government of India they were promoted and transferred to the Oudh Circle. Under these circumstances the complaint of the Conservator is unreasonable, and as the subject has already been disposed of in a prolonged official correspondence, the Lieutenant-Governor regrets that the Conservator should have deemed it necessary to repeat his complaint in his annual report. The Lieutenant-Governor recognises, in view of the location of the Forest School at Dehra, the necessity of maintaining a high standard in the working of the forests of the School Circle; but he cannot allow this standard to be obtained at the expense of efficiency in the other Circles. At present the School Circle has, considering the area and the value of its forests, a far stronger staff, both as regards numbers and technical qualifications, than either of the other Circles.

12. *Breaches of Forest Law.*—The following table shows for each Circle the number and class of cases instituted during 1890-91 and 1891-92:—

Circle.		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor produce.	Illegal grazing.	Other offences.	Total.
Central ...	1890-91 ...	20	597	2	55	674
	1891-92 ...	32	418	10	119	579
Oudh ...	1890-91 ...	4	75	82	27	188
	1891-92 ...	14	99	64	19	196
School ...	1890-91 ...	14	53	23	17	107
	1891-92 ...	10	39	27	29	105
Province ...	1890-91 ...	38	725	107	99	969
	1891-92 ...	56	556	101	167	880

It will be seen that there was a slight decrease in the number of cases instituted mainly under the head of misappropriation of forest produce in the Central Circle. There was a considerable increase in the number of prosecutions for injury to the forests by fire in the Central and Oudh Circles. As is remarked by the Conservator, the comparatively small number of prosecutions in the Oudh Circle, when its area is considered, would appear to warrant the conclusion that owing to the laxity or dishonesty of the protective establishment, a large number of offences are not brought to the notice of Divisional Officers.

13. The results of the prosecutions disposed of within the year are compared with those of the previous year in the next statement:—

Results of prosecutions for breaches of Forest Law.

Circle.	Year.	Cases taken into Court.				Percentage of persons convicted to persons prosecuted.	*Cases compromised under section 67.*	
		Convictions.		*Acquittals.*				
		Cases.	Persons.	Cases.	Persons.		Cases.	Persons.
Central	1890-91 ...	48	109	6	14	88	605	955
	1891-92 ...	25	46	18	137	25	546	1,104
Oudh	1890-91 ...	85	137	10	23	85	93	247
	1891-92 ...	61	134	14	52	72	118	230
School	1890-91 ...	15	26	3	3	89	89	264
	1891-92 ..	9	80	2	6	93	92	187
Province	1890-91 ...	148	272	19	40	87	787	1,466
	1891-92 ...	95	260	34	195	57	756	1,521

The results in the Central Circle are eminently unsatisfactory: out of 183 persons prosecuted, only 46 persons were convicted, 137 being acquitted. It is explained that the acquittals were mainly in the Naini Tal Division, and the cases were mostly fire cases in which it is notoriously difficult to obtain a conviction. It would seem that either the people were subjected to needless prosecution on mere suspicion, no sufficient preliminary inquiry having been made, or else the prosecutions have been exceedingly badly conducted, resulting in the acquittal of a large number of guilty persons. This is a matter which should receive special attention from the Conservator. He should examine cases in which the accused are acquitted, and satisfy himself that there was *primâ facie* a good case for prosecution. He should issue instructions to the District Officers to abstain from prosecuting cases in which there is not sufficient evidence to justify a conviction. In the event of there still being a large proportion of acquittals this year, he may consider it necessary to insist on his previous sanction being obtained before persons are prosecuted for incendiarism. In the Oudh Circle there was also a falling off in the percentage of convictions; the results were worst in the Bahramghát Division, where a conviction was obtained only against one person in one case, whilst 10 persons concerned in four cases were acquitted. The most

important case in the School Circle was one in which 66 persons were prosecuted for stealing sleepers which had been carried away by floods. It is to be regretted that although the persons charged were undoubtedly guilty of theft, the illegal action of the police in the preliminary investigation, and the irregular procedure adopted by the prosecution in conducting the case, should have made it impossible for Government to defend the convictions when they were appealed against before the Panjáb High Court who have acquitted all the accused.

14. *Forest Fires.*—The following statement compares the results of the fire conservancy operations of the year with those of 1890-91:—

Forest Fires.

Circle.		Total area of Circle.	Area attempted to be protected.	Percentage of area attempted to total area of Circle.	Area actually protected.	Failures.	Percentage of failure.	Cost during the year.	Cost per acre.
		Acres.	Acres.		Acres.	Acres.		Rs.	Pies.
Central ...	1890-91 ...	1,082,756	559,068	51·59	544,897	14,171	2 53	21,376	7·34
	1891-92 ...	1,108,761	700,269	59·91	679,028	21,241	3·03	23,608	6·47
Oudh ...	1890-91 ...	770,316	495,101	64·27	466,750	28,351	5 72	12,808	4·96
	1891-92 ...	791,970	634,669	80·12	596,539	38,130	6·00	19,233	5·81
School ...	1890-91 ...	461,809	403,250	87·30	402,875	375	·09	5,057	2·09
	1891-92 ..	460,890	406,100	88·11	403,674	2,426	0·59	5,873	2·79
Total ...	1890-91 ...	2,314,881	1,457,419	62 95	1,414,522	42,897	2·94	39,241	5·17
	1891-92 ...	2,421,621	1,741,038	71 89	1,679,241	61,797	3·54	48,714	5·39

There was a large increase, amounting to 283,619 acres, in the area over which protective measures were taken, mainly in the Central and Oudh Circles. Owing to the failure of the winter rains and the long dry hot weather, the year was unfavourable to successful fire protection. It is therefore a matter for congratulation that the fires which were numerous should have been confined to 61,797 acres, or to 3·54 per cent., of the 1,741,038 acres over which pretection was attempted. The character of the year was also the cause of a slight rise in the cost of protection, which, however, did not exceed 5·39 pie per acre.

15. The best results were obtained in the School Circle at the smallest cost. The least satisfactory feature in the returns for this Circle is that eight fires are put down to incendiaries, no evidence justifying a conviction, however, being forthcoming. The cost of the operations per acre attempted was highest in the Central Circle, where, however, there was, compared with the previous year, a reduction from 7·34 pie to 6·47 pie. There were 78 forest fires, of which 45 occurred in the Naini Tal Division. The Divisional Officer and staff deserve credit for confining the 45 fires to 6,060 acres. The largest fire, extending over nearly 4,000 acres in the Kumaun Division, appears to have been due to negligence in burning a fire-line. The result of the

departmental inquiry into this case, and the punishment awarded, if any, should be reported for the information of Government. In the Ganges Division for the second year in succession there were no fires.

16. The Oudh Circle is responsible for 62 per cent. of the whole area burnt. The poor results are entirely due to the complete failure of the measures taken to protect the forests in Pilibhit and Bhira; in the former Division 25,271 acres, or nearly half of the area attempted, were burnt: in the latter fires extended over 9·84 per cent. of the area attempted. In Kheri there were no fires for the second year in succession: this result is very satisfactory, even though it has been obtained at the high cost of 12·96 pie per acre. In Bahraich and Gorakhpur the area burnt was only 140 and 225 acres respectively. The results in Pilibhit are, fortunately, so exceptional as to require special investigation. The statement given in the margin shows that though the area burnt has not before been so large as in the present year, the results have continuously been bad, worse than in any other Division in the Provinces. The first impression gathered from the Conservator's remarks is that this is mainly due to the fact that under the settlement rules firing is permitted in the unrestricted compartments of the Puranpur forests, which alternate with the restricted compartments. This however is not the case, for the Puranpur forests were not protected, and the whole of the 25,271 acres burnt were in forests where there is no such rule. The total number of fires was 16, which, considering the unfavourable season, was not exceptionally large, though one-third of them are ascribed to carelessness on the part of the forest staff. Each fire however extended over an average area of 1,580 acres. This is extremely unsatisfactory, and shows how inadequate were the measures taken to arrest the progress of a fire when once lighted. This must have been due either to carelessness and want of energy on the part of the forest staff, or to an inefficient system of fire-lines. The cutting or widening of the fire-lines is receiving the attention of the Conservator, and should be carried out before next season. The inquiry into the carelessness of the forest staff has suffered from the delay of the Divisional Officer in making the inquiries and in reporting the fires to headquarters. The result of the inquiry and the punishment awarded to the individuals in fault should be reported for the information of Government. In the School Circle the Government have, on the application of the Conservator, sanctioned rewards for specially good work in the matter of fire conservancy and in extinguishing fires, with most excellent results; and

Statement showing the result of fire conservancy operations in the Pilibhit Forest Division for six years.

Division.	Year.	Area attempted to be protected.	Failures.	Percentage of area burnt to area attempted.
		Acres.	*Acres.*	
Pilibhit.	1886-87 ...	43,779	20,342	46·46
	1887-88 ...	43,778	7,500	17·13
	1888-89 ...	43,778	20,372	46·53
	1889-90 ...	43,778	16,375	37·40
	1890-91 ...	43,735	9,688	22·15
	1891-92 ...	51,519	25,271	49·05

while Government would be prepared to grant rewards in other Circles also, it must insist on adequate punishment being meted out in cases of proved negligence and carelessness. The question of prohibiting the annual firing of the unrestricted compartments of the Puranpur forests, with a view to the efficient protection of the restricted compartments, has been referred to the local Revenue authorities for their opinion. It has also been proposed to define the compartments within which right-holders shall exercise their rights. This will make it possible to insist on the performance by the right-holders of the duties imposed upon them by section 78 of the Forest Act.

17. Conservators were asked to report as to the working of the rules under section 25 of the Forest Act, published by Notification No. 349F., dated 2nd May 1891. The Conservator of the Central Circle states that they have had but little practical effect, and notes that in no case was any notice given, as required by rule 1*(a)*, of intention to fire any land in the neighbourhood of a Government forest; he also states that no infringement of the rules was brought to light. The report however shows that 17 fires entered the forests by crossing the exterior fire-lines: he will be asked whether an inquiry was made in the case of each of these 17 fires, and whether in none of those cases was there any infringement of the rules. The Conservator of the Oudh Circle says the rules have had no effect, because though private owners may have wished to obey them, they cannot restrain their graziers. It should however be remembered that in a matter of this sort the owners of the private forests must be held responsible for the acts of their graziers. The Conservator of the School Circle alone is of opinion that the rules have worked well. No suggestions for their amendment have however been received. Any proposals the Conservators of the Oudh and Central Circles may wish to make will be carefully considered.

18. The experiment of firing the chír forests in the early part of the hot weather, with a view to preventing a fire later on when the damage would be more serious, has not yet proved successful.

19. The receipts on account of grazing dues and the sale of fodder grass in each Circle are compared with the receipts of previous year in the following statement:—

	1890-91.	1891-92.
	Rs.	Rs.
Central Circle	35,611	35,391
Oudh „	50,305	52,726
School „	18,679	34,190
Province ...	1,04,595	1,22,307

From the statement given in paragraph 32 of the Central Circle report it appears that the sum of Rs. 35,783 includes Rs. 33,917 received on account of grazing dues and Rs. 1,866 the price of grass sold, of which grass to the value of Rs. 392 was removed by Government agency and to the value of Rs. 1,474 by purchasers. The abstract of Form No. 55, however, shows the receipts from grazing dues as

Rs. 35,391, which apparently includes the price of grass removed by purchasers, but not of that of the grass removed by Government agency, which would there seem to have been included under the head of other minor produce.

The percentage of the area closed to grazing in each Circle to the total area was 50·72 for the Central Circle, 41 for Oudh and 29·23 for the School Circle.

The only changes of any importance were in the Oudh Circle. The Conservator will be asked why the area closed to grazing in the Gorakhpur Division has been reduced from 105 to 58 square miles, and why in Bahraich 13 square miles were closed to grazing in addition to that closed in the previous year.

The grazing rules for the Saháranpur and Dehra Dún Divisions have had to be abandoned; provisional rules have been introduced, and the Conservator has been requested to devise, in consultation with the Revenue Officers, a fresh and simpler system.

20. *Natural Reproduction.*—There is general evidence of the excellent reproduction going on in areas protected from fire and grazing, but the Conservator, Central Circle, has not found that marked superiority of reproduction in the closed over that in open portions which he would have anticipated. It is not, however, very clear whether he is referring to a particular class of forest or more generally to all the forests in his Circle. The Deputy Conservator of Naini Tal advocates that grazing should be permitted after the young growth is sufficiently advanced to be out of danger, as a check on the severity if not a preventive of fire. The Conservator of the Oudh Circle writes of the further deterioration and ultimate destruction of the forests in which grazing is allowed. In several of the forests in his Circle he has proposed to define the blocks in which the different villages are to exercise their rights of grazing. He should at the same time consider whether it would not be possible and preferable to assign to each village or group of villages two blocks which could be alternately closed and opened to grazing. Such a course would be advisable even if it necessitated the periodical opening of small portions of some of the forests now closed to grazing, so as to allow of reproduction in the forests classed as open.

The Conservator, Oudh Circle, also notes that protection from fire and grazing in some localities has unduly favoured the reproduction of inferior species at the expense of the more valuable sál. He does not however consider the question of importance, as the proportion will be regulated by the improvement fellings. It is however questionable whether the improvement fellings, as it is now proposed to carry them out, will be sufficiently frequent, and whether intermediate light thinning will not be required to prevent the suppression of the sál tree.

Generally speaking, there seems to have been but little seed. Sál flowered well in the Oudh and Central Circles, but the seed formed too early in the hot weather to have a fair chance of germinating.

21. *Artificial Reproduction.*—The expenditure on artificial reproduction during the past two years is compared in the margin. There appears to be some mistake in the figures of the School Circle report. Those given in the margin are taken from Form 52. The statement given in paragraph 28 of the report gives the expenditure as Rs. 3,648, the difference being in the figures for the Saháranpur Division. The cultural operations in the Bundelkhand Division, which have now been carried on for some years, have been a complete failure, and the area has been abandoned. The Lieutenant-Governor would like to have further information as to the causes of this continued failure. It is noticed that in some years the seed failed to germinate, and in others—as in the year under review—the seedlings died soon after germination. It would seem that either the class of tree sown was unsuitable to the soil and climate of Bundelkhand, or else that proper methods were not adopted. It was suggested in last year's report that the sowings should be broadcast or in pits.

Circle.		1890-91.	1891-92.
		Rs.	Rs.
Central	...	2,719	2,166
Oudh	...	2,803	636
School	...	1,303	3,644
Province	...	6,825	6,446

The Conservator has been requested to start an experimental plantation of date palms, as it believed that the dry climate of Bundelkhand will prove more suitable to them than the moister climate of Saháranpur or Lucknow.

22. *Works of Improvement.*—Climbers were cut over an area of 45 square miles in the Central Circle, 23 in the Oudh Circle and 12 in the School Circle; the cost averaged only Rs. 35 per square mile in the first two Circles, but amounted to Rs. 100 per square mile in the School Circle.

23. *Experiments.*—From the record of the measurements of the growth of sál taken in the Central Circle, the Conservator arrives at the unexpected conclusion that the annual production of wood per acre is greater in the unthinned than in the thinned forests. The information available in Appendix C does not however warrant such a conclusion. The sum of the increments in the girth of all the trees in an acre of unthinned forest is, owing to the larger number of trees, greater than that in an acre of thinned forest, but the area of a circle varies as the square of its radius, and therefore the production of wood corresponding to an increase in girth of one inch is far greater in the case of a large tree than in the case of a small tree. The trees in a thinned area have a larger average girth than those in an unthinned area, and therefore with the same total increase in girth, the increment in wood would be considerably in favour of the thinned forest. Experiments made in the Kumaun Division go to show that the smaller the girth of the khair tree the greater is the yield of katha per cubic foot of timber. Further experiments should, as suggested by the Conservator, be undertaken with a view to ascertaining the produce of coppice shoots. In the Gorakhpur Division sál seedlings have been successfully reared in clear felled strips where the partial shelter afforded by the uncut strips was insufficient for natural reproduction; the expenditure however was too heavy to allow

of the adoption of this system on a large scale. The attention of the Collector of Gorakhpur will be drawn to the remarks of the Conservator as to the neglect by the zamindárs of the roadside trees made over to their charge. In the School Circle further experiments have been made in the manufacture of turpentine; the quality obtained has been excellent, and the Conservator has been taking active measures to create a market for the Dehra produce in Upper India. One hundred maunds of chír tar has also been extracted at a cost of only Rs. 2-8-0 per maund. It is not said whether this was sold at a remunerative price. It would be convenient for purposes of reference if as in the other reports a separate paragraph in Chapter III were devoted to these and similar experiments, instead of entering the account of them under the head of *Yield and Working*.

24. *Communications and Buildings.*—The outlay in each Circle on communications and buildings during the year is given in the statement below, which also compares the provincial expenditure with that of the previous year :—

Communications and Buildings.

Circles.	Roads and bridges.	Buildings.	Other works.	Total.	Percentage on gross expenditure of the year.
	Rs.	Rs.	Rs.	Rs.	
Central	37,274	15,819	1,647	54,740	19·80
Oudh	13,630	13,103	1,223	27,956	6·96
School	10,060	9,191	1,081	20,332	7·32
Total ...	60,964	38,113	3,951	1,03,028	10·78
Total, 1890-91 ...	47,596	36,845	3,382	87,823	9·56

In the Central Circle 20 miles of new cart road were made at a cost of Rs. 9,709, and 54 miles of paths at a cost of Rs. 1,067. The most important work was the Airadeo cart road, the cost of which however was heavy, amounting to Rs. 1,535 per mile. Rs. 4,651 were also spent on the repairs of the Kalaghar-Boxar cart road. The expenditure on communications must always be heavy in this Circle, but cannot be avoided.

The chief item of expenditure under this head in the Oudh Circle was Rs. 7,062 expended on bridges in the Kheri District. It is understood that this chiefly represents the expenditure on the Srinagar bridge-of-boats on the Sarda; the average expenditure on the maintenance of this bridge during the four previous years having been only Rs. 3,725, the Conservator will be asked the reason for the greatly increased expenditure of the year. The most important work in the School Circle was the widening and repair of 29 miles of the Chakrata-Tons road at a cost of Rs. 2,002.

25. The next statement shows the number of buildings in each Circle :—

Circle.	Rest-houses for controlling staff.	Quarters for subordinates.	Offices, stores, revenue depôts.
Central	48	101	56
Oudh	60	52	76
School	28	21	73
Province	136	174	205

The two statements given in paragraph 47 of the Central Circle do not agree: probably the Hingan bungalow, which is excluded from the second statement, is included in the first. Two new rest-houses were constructed in the Central Circle. More quarters for subordinates would appear to be urgently required in the Kumaun and Ganges Divisions, and also in the Kheri and Bhira Divisions of the Oudh Circle: in the former no quarters for subordinates are shown. It is presumed they are accommodated in the out-houses attached to the inspection-houses, but considering the area of the forest this does not appear to be sufficient.

26. *Outturn and Working.*—The reports contain a statement showing in detail the main facts of the year's outturn and working. This statement appears to be prepared on different principles in different Circles. It has also frequently been found to be incorrectly compiled. Conservators will be asked to report clearly the principles on which it has been prepared by them in the past, and whether they have any suggestions to make as to its improvement. On the receipt of their replies, instructions will be issued so as to ensure its being compiled on a uniform system in future.

27. The following abstract shows the timber, fuel and minor produce removed from the forests during the year and the agency by which it was removed :—

Total outturn of the Forests.

	In cubic feet (000's omitted).							
	Class.				*By whom removed.*			
	Total outturn.	Regeneration fellings.	Amelioration fellings.	Unclassed fellings.	Government agency.	Purchasers.	Free grantees.	Right-holders.
Central Circle.								
Timber ...	9,72,	5,58,	1,41,	2,73,	14,	7,55,	45,	1,58,
Firewood ...	26,24,	3,98,	1,03,	21,23,	1,66,	10,92,	6,	13,60,
Minor produce...	Rs. 2,40,789	...	...	...	Rs. 8,428	Rs. 1,83,509	Rs. 47,157	Rs. 1,695
Oudh Circle.								
Timber ...	22,11,	1,76,	2,33,	18,02,	2,88,	6,05,	10,80,	2,38,
Firewood ...	27,25,	8,	15,60,	11,57,	14,01,	8,58,	2,85,	1,81,
Minor produce...	Rs. 1,65,590	...	...	...	Rs. 28,282	Rs. 1,17,461	Rs. 13,735	Rs. 6,112
School Circle.								
Timber ...	10,22,	8,40,	1,64,	18,	2,72,	6,61,	89,	...
Firewood ...	23,34,	12,86,	47,	9,91,	2,53,	5,07,	15,64,	...
Minor produce...	Rs. 63,231	...	...	...	Rs. 3,267	Rs. 50,876	Rs. 9,088	...
Gross Total.								
Timber ...	42,05,	15,74,	5,38,	20,93,	5,74,	20,21,	12,14,	3,96,
Firewood ...	76,73,	16,92,	17,10,	42,71,	18,20,	24,57,	18,55,	15,41,
Minor produce...	Rs. 4,69,610	...	...	...	Rs. 39,977	Rs. 3,51,846	Rs. 69,980	Rs. 7,807

Some difficulty has as usual been found in compiling this statement, owing to discrepancies and inaccuracies in the figures in the reports. For instance in Form 55 of the Central Circle report the value of the produce removed by free grantees is given as Rs. 643, whereas Appendix D gives the value at Rs. 436. It has been ascertained that

the latter figure is correct, and that the former erroneously includes Rs. 202 worth of lime and Rs. 5 worth of bamboos used departmentally. These have been entered in the statement as having been removed by Government agency. It is also necessary to explain that the Forms 54 and 55 show the actual produce removed under passes by right-holders, &c., whereas Appendix D shows the total estimated quantity of the produce removed by right-holders, whether under pass or not. The figures of Appendix D have been adopted for the statement in this Resolution as more accurately showing the total yield of the year. Again according to Form 54 of the Oudh Circle the quantity of timber removed by departmental agency is given at 288,267 cubic feet, but in the summary of main facts in paragraph 46 the figure is 254,259 cubic feet. The dry timber collected on lines by departmental agency but removed by purchasers is included in the former figure, but not in the latter. In Form 55 of the School Circle the value of minor produce removed by holders of free grants and right-holders is given thus:—Bamboos Rs. 2, grazing Rs. 8,586, minor produce Rs. 500, total Rs. 9,088; whereas the abstract in paragraph 59 shows bamboos *nil*, grass and grazing Rs. 8,556, minor produce Rs. 502, total Rs. 9,058. It is also observed that no produce is shown in Statements 54 and 55 of the School Circle as having been removed by right-holders, apparently because the Conservator admits no rights in his Circle; but privileged villagers hold much the same position as right-holders, and the produce, which is entered in registers maintained under section 87 of the Forest Code, removed by them should be entered in these forms as having been removed by right-holders and not under the head of free grants. In the column headed free grants should be entered only that produce removed under grants specially sanctioned under section 86 of the Forest Code. Timber to the amount of 4,205,000 cubic feet, fuel to the amount of 7,673,000 cubic feet, and minor produce to the value of Rs. 4,69,610 were removed from the forests during the year. The corresponding figures for the previous year were:—Timber 4,195,000 cubic feet, fuel 6,447,000 cubic feet, and minor produce Rs. 4,14,982.

28. The figures given in the last paragraph include rough estimates of the produce removed by right-holders and grantees. Omitting these uncertain figures, the quantity of timber and firewood removed by Government agency and by purchasers during the year is compared with that similarly removed in the previous year in the following table:—

		Government agency.			Total.	*Purchasers.*			Total.
		Central Circle.	Oudh Circle.	School Circle.		Central Circle.	Oudh Circle.	School Circle.	
		Cubic feet (000's omitted).							
Timber ...	1890-91 ...	36,	7.50,	2,75,	10,61	7,15,	4,85,	5,74,	17,74,
	1891-92 ...	14,	2,88,	2,72,	5,74	7,55,	6,05,	6,61,	20,21,
Firewood ...	1890-91 ...	1,58,	14,52,	2,53,	18,63	14,72,	5,61,	6,47,	26,80
	1891-92 ...	1,66,	14,01,	2,53,	18,20	10,92,	8,58,	5,07,	24,57

Compared with the previous year there was a decrease in the total quantity both of timber and of fuel removed by Government agency and by exporters, amounting in the case of timber to 240,000 cubic feet and in the case of fuel to 266,000 cubic feet. There has however been a satisfactory increase in the quantity of timber removed direct by purchasers, noticeably in the Oudh Circle, where the increase amounts to 120,000 cubic feet; while the quantity removed by Government agency has decreased from 750,000 cubic feet to 288,000 cubic feet. The variations in the outturn of each Circle are considered in the next paragraph.

29. In the Central Circle the departmental operations were limited to the removal of fuel in the Naini Tal Division and of fuel and timber in the Bundelkhand Division. The most marked features of the year are the diminished outturn in Kumaun and the increase in the outturn of timber and in the exports of bamboos in Bundelkhand. The decrease in Kumaun is said to be due to restricted fellings having been necessitated by the excessive fellings of previous years and to a diminished demand for produce in the east of the Division; while the progress made in Bundelkhand may be ascribed to the introduction of separate management.

In the Oudh Circle the most important features are the substitution of direct sale for departmental felling, mainly in the Bahraich Division; the large decrease of 461,374 cubic feet in the outturn of Kheri, which, however, is counterbalanced by the increase of 523,602 feet in Bahraich; the restricted operations at Bahramghát; and the failure of the Department to fulfill the contract for the supply of fuel to the Railway from the Pilibhít and Bhíra Divisions. The decrease in the outturn of timber from the Kheri forests is put down to there having been no sleeper works. It is however surmised that the decrease is also due to the fellings having intentionally been restricted irrespective of the demand, as the Conservator was of opinion that in the past the fellings had been excessive. This has formed the subject of separate discussion in connection with the Kheri working plan, and the conclusion arrived at was that owing to the introduction of the railway it would in future be possible to dispose at a remunerative price of the improvement fellings which the Conservator has proposed to substitute for the selection fellings, as carried out in the past, and thereby improve the forests without allowing the revenue to suffer. With regard to the decrease in the sale in timber at Bahramghát, the Conservator has expressed an opinion that the saw mills have done the work for which they were intended, and that in future it will be far more profitable to sell the wood standing in the forests. The Conservator will be asked to report separately in connection with the present position of the saw mills and of the prospect of contractors being forthcoming in sufficient numbers who will offer for the standing timber a price which will make it more profitable not to saw up the timber at Bahramghát. If such prove to be the case it will be necessary to consider whether the machinery

at Bahramghát should not be disposed of, and whether it will not be possible to abolish the Division and reduce the establishment, placing the drift operations in charge of a trustworthy Ranger under the control of the Deputy Conservator. A report will also be called for as to the circumstances under which the contract for the supply of 64,000 cubic feet of fuel from the Pilibhit forests was broken off, and why in the Bhira Division only 143,010 cubic feet of fuel were supplied against a contract of a 640,000 cubic feet. In the School Circle there was a satisfactory increase in the outturn, resulting in the largest receipts on record.

30. The value of the timber and fuel in stock in the Departmental depôts at the beginning and the end of the year is shown in the following table :—

Depôt stocks of timber and firewood.

Circle.		At beginning.		At end.	
		Quantity.	Value.	Quantity.	Value.
		C. ft.	Rs.	C. ft.	Rs.
Central ...	Timber ...	1,809	552	1,464	1,084
	Firewood ...	3,428	3,945	1,734	5,533
Oudh ...	Timber ...	1,096,483	7,65,824	964,078	6,44,879
	Firewood ...	364,649	22,102	360,797	16,689
School ...	Timber ...	231,098	1,56,950	232,387	1,97,544
	Firewood ...	15,942	2,914	183,347	24,919

31. The produce of the forests and its estimated value are shown in the next statement :—

(000's omitted from cubic feet and rupees.)

		Central Circle.		Oudh Circle.		School Circle.	
		C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
Timber ...	1890-91 ...	9,61,	3,59,	23,30,	6,53,	9,04,	3,85,
	1891-92 ...	9,72,	3,27,	22,11,	5,60,	10,22,	4,23,
Firewood ...	1890-91 ...	17,51,	59,	23,82,	78,	23,14,	98,
	1891-92 ...	26,24,	68,	27,25,	82,	23,24,	1,26,
Grazing and minor produce.	1890-91 ...	...	2,02,	...	1,44,	...	68,
	1891-92 ...	...	2,41,	...	1,65,	...	63,

32. *Financial.*—The receipts, expenditure and surplus during each of the last five years are given below :—

Receipts, Expenditure and Surplus.

Circle.	Receipts.					Expenditure.					Surplus.				
	1887-88.	1888-89.	1889-90	1890-91.	1891-92	1887-88.	1888-89.	1889-90	1890-91.	1891-92	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
Central ..	4,60,450	5,23,963	5,92,948	5,80,284	5,32,276	2,27,543	2,54,400	2,59,920	2,49,568	2,76,396	2,32,907	2,79,463	2,33,023	3,30,616	2,56,000
Oudh ...	4,29,670	5,29,654	6,88,556	7,08,907	7,88,967	3,14,439	3,16,879	4,33,127	4,02,716	4,01,137	1,15,431	2,12,775	2,56,429	3,06,351	3,87,830
School ...	3,57,064	3,90,315	4,22,680	3,46,538	4,39,372	2,77,592	2,67,470	2,71,104	2,66,513	2,77,717	79,472	1,22,845	1,51,556	81,915	1,61,655
Total ...	12,47,384	14,63,932	17,14,159	16,27,879	17,31,613	8,39,574	8,38,749	9,63,151	9,18,897	9,55,250	4,17,810	6,34,083	7,51,008	7,18,982	7,76,293

33. The following tables give the chief financial details of the year's operations :—

Receipts and Expenditure under the headings of Departmental Timber Operations, Other Revenue and Formation, &c., of Forests.

Circle.		Departmental timber operations			Other revenue.			Formation, protection and improvements.	Net surplus.
		Receipts.	Charges.	Surplus.	Receipts.	Charges.	Surplus.		
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central ...	1890-91 ...	42,584	31,320	11,264	5,37,800	1,05,085	4,32,715	1,13,163	3,30,816
	1891-92 ...	44,451	35,736	8,715	4,88,823	1,15,076	3,73,747	1,25,554	2,56,908
Oudh ...	1890-91 ...	4,32,805	2,34,255	1,98,550	2,76,162	96,412	1,79,750	72,049	3,06,251
	1891-92 ...	4,51,931	2,75,098	1,76,833	3,07,036	61,643	2,45,393	64,396	3,57,830
School ...	1890-91 ...	1,82,671	1,54,284	28,387	1,65,857	40,920	1,24,937	71,409	81,915
	1891-92 ...	2,59,345	1,57,587	1,01,758	1,79,927	38,873	1,41,054	81,257	1,61,555
Total ...	1890-91 ...	6,58,060	4,19,859	2,38,201	9,79,819	2,42,417	7,37,402	2,56,621	7,18,982
	1891-92 ...	7,55,727	4,68,421	2,87,306	9,75,786	2,15,592	7,60,194	2,71,207	7,76,293

Details of Receipts under the principal budget heads.

Circle.	Timber and other produce removed from the forests by Government agency.		Timber and other produce removed from the forests by consumers and purchasers.		Confiscated drift and waif wood.		Forests not managed by Government.		Miscellaneous.		Total in 1891-92.
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central ...	42,584	44,451	5,32,607	4,81,040	1,564	1,695	15	...	3,014	6,088	5,33,274
Oudh ...	4,32,805	4,51,931	2,37,103	2,76,759	26,892	16,839	1,855	...	10,312	13,439	7,58,968
School ...	1,77,763	2,56,704	1,47,395	1,54,796	7,041	3,959	12,240	8,179	4,090	15,634	4,39,272
Total ...	6,53,152	7,53,086	9,17,105	9,12,595	35,497	22,493	14,110	8,179	18,016	35,161	17,31,514

Expenditure on Conservancy and Works.

Circle.		Timber and other produce removed by Government agency.	Timber and other produce removed by consumers and purchasers.	Confiscated drift and waif wood.	Rent on leased forests.	Live stock, stores, tools and plant.	Communications and buildings.	Demarcation, improvement and extension of forests.	Miscellaneous.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central ...	1890-91 ...	21,238	27,087	...	539	13,692	44,911	33,434	1,755	1,42,656
	1891-92 ...	23,831	26,387	6	507	13,157	54,740	36,193	1,367	1,55,988
Oudh ...	1890-91 ...	2,11,116	10,105	7,887	...	8,872	26,804	23,979	2,881	2,91,644
	1891-92 ...	2,06,078	11,027	8,292	...	8,710	27,957	22,061	10,252	2,94,377
School ...	1890-91 ...	1,01,550	1,446	3,003	11,150	5,749	16,108	16,397	* 17,360	1,72,763
	1891-92 ...	1,07,448	3,112	1,679	12,554	3,792	20,331	20,813	† 11,207	1,80,936
Total ...	1890-91 ...	3,33,904	38,638	10,890	11,689	28,313	87,823	73,810	21,996	6,07,063
	1891-92 ...	3,37,157	40,526	9,977	13,061	25,659	1,03,028	79,067	22,826	6,31,301

* Includes Rs. 1,384, being expenditure on forests not managed by Government.

† Includes Rs. 1,778, being expenditure on forests not managed by Government.

Expenditure on Establishments.

Circle.	Salaries.		Travelling allowances.		Contingencies.		Total.	
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Central	87,890	97,723	13,100	15,419	5,922	7,236	1,06,912	1,20,378
Oudh	91,160	85,662	14,136	13,944	5,779	7,154	1,11,075	1,06,760
School	81,854	84,332	7,426	7,020	4,570	5,428	93,850	96,780
Total ...	2,60,904	2,67,717	34,662	36,383	16,271	19,818	3,11,837	3,23,918

34. The financial results are eminently satisfactory, showing as they do the largest surplus on record. The receipts in the Central Circle alone show a falling off, and the surplus of the Oudh Circle is not only the highest on record for that Circle, but is larger than has ever been yielded by either of the other Circles. It is largely due to the sale of timber stock in the Kheri Division and to the increased receipts from Bahraich, which with improved communications promises to become from a revenue point of view the most important Division in the Circle, if not in the Provinces. The falling off of revenue in the Central Circle is chiefly due to the diminished receipts of the Kumaun Division, but with the exception of Bundelkhand every Division in this Circle shows a smaller surplus. The excellent results in the School Circle are due to the large receipts from the Jaunsár Division, of which the surplus is higher than that of any Division in any of the Circles.

35. The balances of revenue outstanding in the Oudh and School Circles were large, amounting to Rs. 36,524 and to Rs. 47,645 respectively. No explanation for these balances having been given, it will be called for.

36. In conclusion, the Lieutenant-Governor desires to record his sense of the excellent work done by the officers of the Forest Department during the year, and of the good results obtained.

J. J. D. LATOUCHE,

Chief Secy. to Govt., N.-W. P. and Oudh.

Nos. $\frac{855-857F.}{459A-16}$.

ORDER.—Ordered that a copy of the above Resolution (with copy of the Report) be forwarded to the Conservators of Forests, Central, Oudh and School Circles, for information and guidance.

Nos. $\frac{858-865F.}{459A-17}$.

Ordered, also, that a copy (with copy of Report) be forwarded to the Commissioners of the Meerut, Benares, Gorakhpur, Rohilkhand, Allahabad, Kumaun, Lucknow and Fyzabad Divisions, for information.

No. $\frac{866F.}{459A-18}$

Ordered, also, that a copy (with copy of Report) be forwarded to the Comptroller-General, Forest Branch, Calcutta, for information.

No. $\frac{867F.}{459A-19}$

Ordered, also, that a copy (with copy of Report) be forwarded to the Inspector-General of Forests to the Government of India, for information.

By order, &c.,

F. E. TAYLOR,

Under-Secy. to Govt., N.-W. P. and Oudh.

No. 149 F., dated Calcutta, the 8th February 1893.

From—SIR E. C. BUCK, KT., C.S.I., *Secretary to the Government of India,*

To—*The Secretary to the Government of the North-Western Provinces and Oudh, Revenue (Forests) Department.*

I AM desired to acknowledge the receipt of your letter No. 870 F., dated the 3rd October last, forwarding, for the information of the Government of India, the Annual Reports of Forest Administration in the North-Western Provinces and Oudh for the year 1891-92, accompanied by His Honour the Lieutenant-Governor's Resolution thereon. The Reports, although submitted earlier than in 1891, were, owing no doubt to their preparation being required at an inconvenient season, received more than one month after the prescribed date.

Under recent orders such Reports will be written when the pressure of outdoor work is over: greater punctuality should therefore be observed in future.

2. The alterations in the recorded area of forests of all classes administered by the Department resulted in a net addition of 88 square miles, of which 59 square miles are on account of rectification of previous figures. In the Central Circle 102 square miles were reserved, mainly in the Banda District. The distribution of the forests amongst the three Circles was as follows:—

CIRCLES.	AREA, IN SQUARE MILES.				Proportion of Forests to whole area of Province (107,441 square miles).
	Reserved Forests.	Protected Forests.	Unclassed Forests.	TOTAL.	
Central	1,733	94	35	1,862	2
Oudh	1,237	...	5	1,242	1
School	798	...	14	812	1
TOTAL in 1891-92 .	3,768	94	54	3,916	4
" " 1890-91 .	3,602	94	132	3,828	4
Difference in 1891-92 . .	+166	...	—78	+88	...

3. The Government of India observe that it is not as yet possible to furnish complete information regarding forests and pasture-lands at the disposal of the State, but it is understood that this subject will be fully treated in connection with this Department's Circular of the 15th July 1891, on the question of fuel and fodder reserves.

4. The boundary work executed was small. The Oudh forests, than which few in India are more valuable, are reported to be very insufficiently demarcated, and it is satisfactory that this defect will shortly be remedied by the approaching survey operations.

5. The remarks on Forest Settlements, contained in the Central and Oudh Circle Reports, have been perused with interest in connection with a Note on the subject, drawn up by the Inspector General of Forests for the information of His Honour the Lieutenant-Governor, and submitted also to the Government of

India. A Forest Settlement contemplates the acquisition by the State of an unassailable title in its forest property. Such a title, in populous localities at least, must evidently be the first step towards efficient forest conservation, and it is satisfactory that the subject is now receiving the attention which it deserves.

6. No new working-plans were sanctioned during the year. In all three Circles, however, the necessity for more organized methods of forest exploitation is admitted, and various plans are under preparation, especially in the Oudh Circle, where also a survey of the forests has been ordered with a view to the elaboration of the various schemes.

7. The following statement shows the number of breaches of the forest rules which occurred during the year :—

Circle.	Number of new cases			Proportion of convictions to total number of cases decided by the Courts.
	Taken into Court.	Compounded.	Total.	
				Per cent.
Central	36	543	579	58
Oudh	77	114	191	81
School	13	86	99	82
Total in 1891-92	126	743	869	74
" " 1890-91	169	759	928	89
Difference in 1891-92	−43	−16	−59	−15

The working of the forest police has been so fully criticised in His Honour's Resolution that no further remarks appear necessary.

8. The fire-protection of the forests during the year may on the whole be considered satisfactory, since, although the results obtained were inferior to those of 1890-91, the area attempted was increased by 445 square miles, or 19 per cent., while the weather of the year was remarkably unfavourable to success. The percentage of failures was 3·54, as against 2·94 in the preceding year. This fall in the record is entirely due to the extensive failures in the Pilibhit and Bhira Divisions. It is to be regretted that some of the fires seem to have been due to such preventible causes as unreadiness or carelessness on the part of the forest staff. The policy adopted in the School Circle of specially rewarding subordinates for exceptionally good work in the trying operations of fire-conservancy has doubtless much to recommend it, but the Government of India fully agree that adequate punishment should be meted out in cases of proved negligence and carelessness. It would not be fair to hold the superior officers responsible for all acts of their subordinates which may cause failure, but it is a matter of the greatest importance that Divisional and Range Officers should personally convince themselves that all measures, necessary to meet the dangers of the fire-season, are completed sufficiently early in the year.

9. The Report and the Resolution treat fully of the natural reproduction of the forests and of works of improvement undertaken in them. These questions continued to meet with the necessary attention at the hands of the local officers, and no further review of the operations of the year need be made.

10. The outturn from the forests under the heads of timber and fuel was respectively 4,205,000 cubic feet and 7,673,000 cubic feet, and minor

produce to the value of R3,50,512 was also extracted. These figures exceed those of the previous year, the yield of fuel in particular having been greater by 1,226,000 cubic feet. Neglecting the uncertain estimates of produce granted free, there was a decrease, as compared with the previous return, of 485,800 cubic feet of timber removed by Government agency, principally due to the fostering in the Oudh Circle of the system of direct sales to purchasers; and the export of timber thus sold increased by 245,600 cubic feet. There was a diminution in the extraction of fuel by purchasers of 222,500 cubic feet.

11. The financial results of the year's working, as compared with the figures for 1890-91 and the quinquennial period ending with that year, were :—

Circle.	Receipts.	Charges.	Surplus.	Proportion of surplus to receipts.
	R	R	R	Per cent.
Central	5,38,274	2,76,366	2,56,908	48
Oudh	7,58,967	4,01,137	3,57,830	47
School	4,39,272	2,77,717	1,61,555	37
Total in 1891-92 .	17,31,513	9,55,220	7,76,293	45
" " 1890-91 .	16,37,879	9,19,195	7,18,684	44
Difference in 1891-92 .	+93,634	+36,025	+57,609	+1
Average for the five years ending 1890-91.	15,27,170	8,95,444	6,31,726	41

These results are satisfactory.

12. His Excellency in Council desires me, in conclusion, to convey his acknowledgments for the exhaustive and interesting review issued by the Local Government on the operations of the year, and is glad to observe the commendation bestowed by His Honour the Lieutenant-Governor on the officers of the Forest Department serving in the Province.

Discrepancies noticed in the North-Western Provinces and Oudh Forest Administration Report for 1891-92.

CENTRAL CIRCLE.

Para. 24 of Report.

It is here stated that the breaches of forest rules disposed of, under section 67 of the Forest Act, in 1890-91 amounted to 577 cases, involving 896 persons; whereas, according to Form No. 50 of the Report for that year, there were 605 such cases, involving 995 persons.

Para. 26 of Report (3rd clause).

Compared with the figures of the previous year, there was a net addition in 1891-92 of 67,917, not 83,948, acres to the area over which fire-protection was attempted to be extended by the ordinary establishment.

Para. 30 of Report (statement).

It is here shown that, in 1890-91, 54,309 sheep and goats were admitted into the area open to grazing; whereas, according to the Report for that year (para. 27), the number of such animals allowed to graze was 27,965. The Garhwal Division appears to be accountable for the discrepancy.

Para. 41 of Report.

If, as would appear to be the case, the words—"37 square miles, amounting to R1,310, or R35 per square mile"—refer to the climber-cutting operations undertaken in 1890-91, the quotation is wrong, for the result of such operations in that year was, according to para. 35 of the Report, 29 square miles worked over at a cost of R1,157, or R40 per square mile.

Para. 61 of Report.

The value of live and dead stock on 31st March 1892, and balance in favour of the year on that date, are here shown as R1,78,828 and R18,668, respectively; whereas, according to Form No. 57-B of the Report, the amounts should be R1,75,459 and R15,299.

FORM No. 49.

(*Area of Protected Forests.*)

Ninety-three, instead of 94, square miles are given as the equivalent of the 59,869 acres on the 31st March 1892—*vide* section 268 of the Forest Department Code.

FORM No 58.

(*Summary of Revenue and Expenditure.*)

In this Form fractions of a rupee should not be shown—*vide* section 268 of the Forest Code.

OUDH CIRCLE.

Para. 20 of Report (statement).

From the heading over the last three columns it might be inferred that the figures in those columns referred only to cases of breaches of the forest rules in which compensation was taken; whereas they include also cases which were acquitted. In reckoning compounded cases, only those cases in which compensation has been accepted should be taken into account.

Para. 49 of Report.

If the figures in the statement here given are correct, the remark following it does not represent what was really the case, for there was a balance of 20,587, not 19,669, cubic feet of drift timber in hand at the close of the year.

Para. 56 of Report (3rd statement).

The expenditure in 1891-92 under "A. VII.—Conservancy and Works (Communications and Buildings)" was R27,957, not R17,957; and it exceeded by R1,153 (and was not less by R8,547 as here shown), the expenditure incurred under that head in 1890-91.

FORM No. 52.

(*Area of Plantations.*)

The area of cultural operations on 1st April 1891 is here shown as 39 acres. In the Report for 1890-91 the closing balance was given as 34 acres. The error is due to the fact that the 5 acres of experimental sowings in compartment III of Bhinga block and Raotara plain, which were abandoned during 1890-91, are shown in the column "Area on 1st April 1891" instead of in the column "Area added during the year."

FORM No. 58.

(*Summary of Revenue and Expenditure.*)

In this Form fractions of a rupee should not be shown—*vide* section 268 of Forest Code.

SCHOOL CIRCLE.

Para. 46 of Report (statement).

The amount realized from "minor-produce and grazing" in 1891-92 was R54,889, and not R54,909. The value of the outturn of timber and fuel was R675, and not R678, per square mile.

Para. 59 of Report (statement).

The number (150) and the value (R2) of the bamboos shown in Form No. 55 as having been granted free in 1891-92 have here been omitted. The value of grass and grazing allowed to free-grantees and privilege-holders in 1891-92 is here entered as R8,556: in Form No. 55 the value of such produce is shown as R8,586. Similarly, the value of minor produce removed by free-grantees and privilege-holders is entered as R502: according to Form No. 55 the value of such produce was R500.

FORM No. 49.

(*Area of Unclassed State Forests.*)

The equivalent in square miles of 8,894 acres ("Area on 1st April 1891") and of 8,927 acres ("Area on 31st March 1892") is 14, and not 13—*vide* section 268 of the Forest Department Code.

FORM No. 58.

(*Summary of Revenue and Expenditure.*)

In this Form fractions of a rupee should not be shown—*vide* section 268 of Forest Code.

Government of India Central Printing Office.—No. 943 R. & A.—17-2-93.—255.—J. W. DeB.